2000

Identification of Barriers to the Use of Department of Defense Medical Assets in Support of Federal, State and Local Authorities to Mitigate the Consequences of Domestic Bioterrorism

Donna F. Barbisch
Medical University of South Carolina

IDENTIFICATION OF BARRIERS TO THE USE OF DEPARTMENT OF DEFENSE MEDICAL ASSETS IN SUPPORT OF FEDERAL, STATE, AND LOCAL AUTHORITIES TO MITIGATE THE CONSEQUENCES OF DOMESTIC BIOTERRORISM

BY

DONNA F. BARBISCH

A doctoral project submitted to the faculty of the Medical University of South Carolina in partial fulfillment of the requirements for the degree Doctor of Health Administration
In the College of Health Professions

Dedication

This project is dedicated to the memory of Colonel (retired) Jack Madigan. Jack's relentless pursuit of communicating military performance and capability led me to review the need for military support for domestic bioterrorism. His innate ability to define requirements gave me the drive and confidence to pursue this project. He is sadly missed.

IDENTIFICATION OF BARRIERS TO THE USE OF DOD MEDICAL ASSETS IN SUPPORT OF FEDERAL, STATE, AND LOCAL AUTHORITIES TO MITIGATE THE CONSEQUENCES OF DOMESTIC BIOTERRORISM

BY

DONNA F. BARBISCH

Approved by:

Chair, Project Committee	Carleen Stoskopf, Ph.D.	4/10/00 Date
Member, Project Committee	Doug Johnson II, Ph.D.	4/18/00 Date
Member, Project Committee	Walter Jones, Ph.D.	4/28/00 Date
Member, Project Committee	Michael T. Ryan, Ph.D.,C.H.P.	4/18/00 Date
Dean, College of Health Professions	Danielle N. Ripich, Ph.D.	4/28/00 Date

Abstract of Doctoral Project Report Presented to the
Executive Doctoral Program in Health Administration & Leadership
Medical University of South Carolina
In Partial Fulfillment of the Requirements for the
Degree of Doctor of Health Administration

IDENTIFICATION OF BARRIERS TO THE USE OF DOD MEDICAL ASSETS IN SUPPORT OF FEDERAL, STATE, AND LOCAL AUTHORITIES TO MITIGATE THE CONSEQUENCES OF DOMESTIC BIOTERRORISM

By

Donna F. Barbisch

Chairperson: Carleen Stoskopf, Sc.D.
Committee: Doug Johnson II, Ph.D.
Walter Jones, Ph.D.
Michael T. Ryan, Ph.D.,C.H.P.

Abstract

The threat of the use of a biological agent as a weapon presents the American public with a potential for catastrophic consequences with massive loss of life and economic disaster. Reducing the effect of a biological warfare attack requires resources beyond those found within local or state governments. The integration of appropriate federal assets in a timely fashion will significantly reduce casualties and economic loss.

Military medical assets support the federal response. Managing the consequences of a domestic biological warfare attack is a new role for the military, requiring different support packages than those configured to support the war fight.

This paper examines existing policy for accessing and integrating military assets into the federal response to support state and local disaster capability. Processes are contrasted with differing requirements intrinsic to a biological warfare scenario. Insights into barriers are presented. A model for utilization of military support that balances requirements with capability is proposed.

Acknowledgments

I could not have done this without the support of my family and friends who spent long hours listening to more than they ever wanted to know about domestic terrorism. I would also like to thank my committee for their time and patience with me as I balanced the pursuit of this project with the other demands of my life.

Table of Contents

List of Figures

I. INTRODUCTION

Background and Need

As the United States evolves in a global role as the only remaining superpower, national security issues grow increasing complex. As the threat moves from conventional war to terrorism, and from outside the nation to the domestic arena, the roles and relationships of the Department of Defense in supporting civil authorities are changing. The 1999 National Security Strategy identifies increasing threats to vulnerable civilian targets within the United States. These threats arise from rogue nations, terrorists, and international crime organizations. (Clinton, 1999b) Terrorism can be directed by nation states, rogue elements, or individuals and groups that have a political or social foundation in religious fanaticism, hate organizations, and isolationist or revivalist movements. (Campbell, 1997) The United States becomes a target for those attempting to advance their agenda and flex their political will against U.S. interests. The mission of the Department of Defense in supporting national security is to provide the military forces needed to deter war and to protect the security of the United States. (Clinton, 1999a)

Nations that cannot challenge the United States as near-peer competitors with conventional weapons have the means and possibly the motivation to use unconventional methods to create catastrophic outcomes. These weapons of mass destruction (WMD) include the triad of nuclear, biological, and chemical weapons. Weapons of mass

destruction as a group share very few characteristics with the exception of their potential to produce terror and overwhelming consequences. (Steinweg, 1994) Chemical and biological agents are inexpensive and readily available, but biological agents possess the potential to move through a population virtually undetected until achieving apocalyptic results. These "poor man's nuclear weapons" are becoming an attractive alternative for influencing the balance of power. (Danzig, 1996)

During the Gulf War, amid threats of terrorism aimed at the United States by Saddam Hussein, the United States initiated a classified review of the government's readiness and available plans to respond to an attack. The complex requirements and critical need prompted immediate action to improve response capabilities. (Clinton, 1998b) The 1995 chemical terrorism incident in a Tokyo subway served to focus the nation's attention on the reality of a terrorist event. Reports in the news media suggested that the United States was ill prepared to protect its citizens from the potential devastation resulting from a terrorist use of a weapon of mass destruction. (Sawyer, 1998)

Executive and legislative programs were initiated to improve public safety and capability to respond to a terrorist event. Congress directed the Department of Defense to develop a training program to improve local capability to respond to the consequences of domestic terrorism. Funding was appropriated to review the issues and recommend appropriate changes in the roles and responsibilities of the federal response community. (Congress, 1996) At the executive level, the President published directives assigning specific responsibility to senior agencies with a mandate to improve the federal government's ability to protect, defend, and respond to domestic terrorism. (Clinton, 1995)

Federal response planning initiatives for managing the consequences of domestic terrorism build on the existing Federal Response Plan designed for natural disasters and small-scale sabotage. As the plan transitions from one focused on floods and hurricanes to one of providing for the overwhelming support requirements of a terrorist event, new and more complex relationships are developing among federal agencies.

Efforts to improve local community response to the use of weapons of mass destruction have been based on the chemical threat. (1998) Response templates highlight the need for protective gear to avoid contamination of responders. Victims display symptoms immediately, leading to early recognition of the event. Casualties are considered contaminated from the chemical agent, requiring special equipment and handling prior to medical treatment. Casualty projections typically fall into the thousands. (Assessment, 1993)

A bioterrorism incident requires a significantly different response both in timing and resources. An unannounced event will start with patients seeking care. There will be little requirement for decontamination. Victims may present with influenza-like or similar symptoms. There will be difficulty in determining whether the event was naturally occurring or terrorism related. The potential loss from such an event might range from tens of thousands to millions of casualties. (Franz, 1997) The requirement for medical response of that magnitude and intensity has not been seen in the United States since the Spanish influenza pandemic of 1918. In ten months the Spanish influenza accounted for 550,000 deaths across the United States and more than 21 million worldwide. (Crosby, 1989)

The overwhelming scenario of bioterrorism requires rapid mobilization and integration of tremendous numbers of medical response personnel. The Department of Health and Human Services as the Lead Federal Agent in medical response counts on significant support from the Department of Defense and the Department of Veterans Affairs. (DHHS, 1996) The overwhelming requirements in a bioterrorism event necessitate optimal integration of all supporting medical assets in a timely fashion.

Department of Defense medical personnel train for battlefield management of nuclear, biological, and chemical casualties. They have unique capabilities to treat and manage clinical requirements. But the clear lines of command and control present on the battlefield do not exist in the domestic support arena. (Franz, 1997) The Federal Response Plan integrates twenty-six agencies, defining lead or support roles. (FEMA, 1992) There are many overlapping responsibilities. The Department of Defense maintains a support role in medical response; DoD supports rather than leads the mission. (DHHS, 1996)

Projected developments over the next 25 years do not expect bioterrorism to go away. On the contrary, biological weapons are the most likely choice in the future for potential adversaries in leveraging limited resources against the United States. Attacks on U.S. cities would result in high mortality rates. (Hart-Rudman, 1999) Little evidence exists supporting any one specific location or the magnitude of consequences for such an event. (Franz, 1997) However, because terrorism is perpetuated through chaos and insecurity, a publicly stated and visible capability for mitigating the consequences and reducing casualties can reduce the threat. A well-coordinated local response plan that

rapidly taps into state and federal resources is an effective strategy to combat terrorism. (Fischer, 1998)

Until recently, requests to support civilian efforts in response to catastrophic events have been coordinated through the Director of Military Support within the Army Operations Center. In September 1999, the Unified Command Plan, which assigns missions to the Department of Defense, was revised. It assigned the domestic civil support mission to Joint Forces Command with a dictum to plan for and integrate DoD support to the lead federal agency for consequence management. The plan called for a standing joint task force under the command of a reserve component general officer to fulfill the mission. The deliberate planning process being called for under Joint Forces Command is a significant change from the crisis response called for under the Director of Military Support.

Problem Statement

Several key issues relating to barriers to the use of DoD assets in domestic bioterrorism emerge in this research. The U.S. military medical support role is changing. Differences exist in battlefield medicine and domestic disaster response. The domestic environment is governed by multiple agencies with overlapping roles. Bioterrorism scenarios are significantly different than chemical terrorism, hurricanes, or other natural disasters; support requirements have the potential to overwhelm our collective national assets. The U.S. military derives its fundamental legal jurisdiction from the Constitution, specifically in the phrase, to "provide for the common defense." Further legal guidance comes from an assortment of federal statutes and executive and departmental directives, all affecting roles and missions. This research will examine these barriers and conclude

with a description of the barriers to optimal use of military assets in domestic response to bioterrorism. Recommendations to reduce the barriers in order to optimize National response will be presented.

II. LITERATURE REVIEW

FOUNDATIONS AND HISTORY OF TERRORISM

The increasing threat of the use of weapons of mass destruction gained public awareness early in 1995. On March 20, 1995 an apocalyptic millennialism group launched an attack in downtown Tokyo with the specific intent of causing mass casualties and reducing the capability of those who opposed them. The Aum Shinrikyo cult planned and orchestrated a simultaneous, multi-point sarin gas assault on five separate trains in the Tokyo subway system. The attack created chaos in the city. It sent 5,500 victims seeking immediate care into a healthcare system already filled to capacity. In the final analysis, 1,500 were sickened while the remaining 4,000 were considered "worried well." There were 12 fatalities. Three subways were completely shut down. Five million riders on the subway were at risk at the time of exposure to the chemical agent. Although disruptive, the attack did not fully achieve the objective. An ineffective delivery system and diluted sarin prevented more serious consequences. The post-incident analysis indicated the sarin was only 30% pure. (Campbell, 1997; Zajtchuk, 1997)

The sarin attack was calculated. Police were planning raids against cult facilities. The Aum Shinrikyo was outnumbered. Chemical weapons helped to even the odds and counter the asymmetric threat. Their arsenal contained both chemical and biological weapons. Previous attacks by Aum used sarin, phosgene gas, botulinum toxin, VX, and

anthrax. The Aum is one of many non-government-backed terrorist groups identified as motivated to use unconventional means to perpetuate their cause. They are a sophisticated group with approximately 40,000 members. Like other terrorist organizations, they have amassed a wealth in excess of 1.5 billion dollars with day-to-day operations in commercial enterprises. (Campbell, 1997)

Campbell identifies an existing credible threat in his work on weapons of mass destruction terrorism. Through a process of inductive analysis he projects that a "super-terrorist act" will result in mass casualties of cataclysmic proportion. His study identifies the current trend of using chemical weapons, but suggests that the most likely weapons of choice in the future are biological weapons. Campbell suggests a revolutionary approach to how we do business. He identifies the need to integrate "the multitude of assets we presently possess to combat the terrorist phenomenon."(Campbell, 1997)

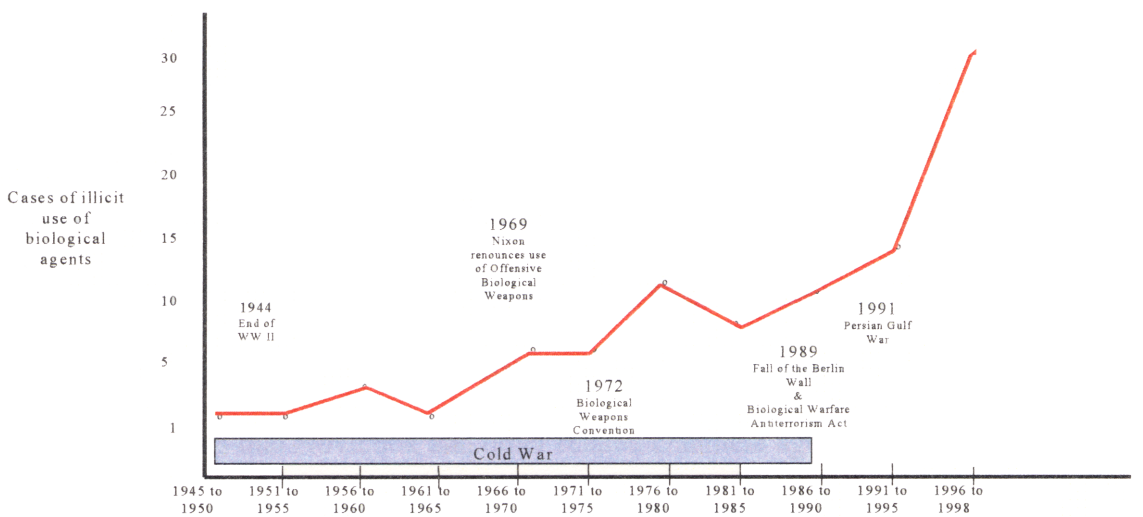
Changes in the international security environment from a nuclear threat during the Cold War to a threat of chemical and biological terrorism have been attributed to the fall of the Soviet Union. From 1945 through 1991, the Cold War focus was global nuclear competition between the United States and the Soviet Union. The capability of mutually assured destruction provided a constraining framework for superpower rivalry. With no peer competitor, the United States prevails as the only remaining superpower. (Johnson, 1997)

As the balance of power shifted to the United States, potential adversaries sought methods to increase their influence in the international arena. For lesser nations and rogue states to compete militarily with the United States, they had to find a way to counter a conventional superpower capability. As the cost of conventional arms escalated,

chemical and biological weapons became an attractive alternative for influencing the balance of power. (Hart-Rudman, 1999; Johnson, 1997; Laqueur, 1998)

Figure 1 serves to illustrate the significant events in the international security environment since the end of the Cold War as well as the increase in cases of illicit use of biological agents. Prior to 1990, the Federal Bureau of Investigation and the Defense Intelligence Agency reported little evidence of a credible bioterrorism threat against the United States. (Carus, 1998) The 1999 National Security Strategy reflects the current environment, stating that "Outlaw states and ethnic conflicts threaten regional stability and progress in many important areas of the world. Weapons of mass destruction (WMD) terrorism, drug trafficking, and international crime are global concerns that transcend our national borders."

Figure 1 Increase in illicit use of biological agents related to significant international events



During the Cold War period, efforts to prepare the nation for international aggression focused on the nuclear threat. Civil Defense programs encouraged and funded communities to build bomb shelters. (Blanchard, 1986) The *Objectives for Local Emergency Management*, a civil preparedness guide published in 1984 by the Federal Emergency Management Agency, focused response on the treatment of nuclear casualties. (FEMA, 1984) Although military medical training included the treatment of unconventional warfare casualties, the main focus continued to be nuclear casualties throughout the early nineties. (Zajtchuk, 1997)

The United States continues to maintain its military strength through conventional arms. U.S. military biological and chemical offensive weapons programs were discontinued in November 1969 when President Nixon renounced the use of biological weapons and limited research to defensive measures only. The resulting Biological and Toxin Weapons Convention of 1972 was signed by Iraq, Russia, and the United States. However, Russian President Boris Yeltsin publicly admitted to maintaining an offensive biological weapons program through March 1992. (Zajtchuk, 1997)

In 1993, the United States and Russia signed the Chemical Weapons Convention. Political pressure delayed ratification by the U.S. Senate due to allegations surrounding the use of a highly toxic nerve agent developed by Russian scientists. The agent, Novichok, is highly lethal and undetectable by conventional military detectors. Speculation exists that Novichok and other related chemical agents were in Saddam Hussein's arsenal during the Persian Gulf War. (Uhal, 1995)

Legitimate scientific application exists for chemical and biological agents, making compliance with the treaty difficult to measure due to this "dual use" phenomenon.

Additionally, many lethal agents can be manufactured with little more than a normal household environment using tools found in any hardware store. United Nations inspections of Iraq's biological warfare capability after the Persian Gulf War identified a capability to produce chemical and biological warfare agents in massive quantities. (Zajtchuk, 1997) Speculation continues over Russia's compliance with the Chemical Weapons Convention. The New York Times suggests a robust bio-warfare capability exists under the direction of Yuri Tikhonovich Kalinin. Today Mr. Kalinin is director of a state-controlled pharmaceutical agency that produces vaccines and medical equipment. Less than a decade ago, then-General Kalinin ran Biopreparat, a facility known as the world's most formidable stockpile of bacteria and viruses developed for biological warfare. (Handelman, 2000)

In an analysis on deterring the use of chemical and biological weapons, Keith Payne, President of the National Institute for Public Policy at Georgetown University, suggests that Western leaders may have difficulty understanding the motivation to employ chemical or biological weapons. What Westerners feel is unreasonable may be rational given the context of different value hierarchies. Therefore, the behavior may be unpredictable as seen through the lens of Western values, but it is not irrational. He points out that these are deliberate and methodical acts. Payne suggests that a conceptual inertia exists in accepting the use of chemical or biological weapons as a credible threat. (Johnson, 1997)

The history of chemical and biological warfare goes back to the use of fire and gas during the Peloponnesian War in the fourth century B.C. Hannibal hurled earthen pots filled with "serpents of every kind" onto the ships of Pergamene warriors in 184

B.C. In 1346, epidemics were attributed to reports that plague-weakened aggressors catapulted victims of plague into town during a Tatar attack in Caffa. Similar attacks occurred during the Black Plague of the 14th and 15th centuries and again in Russia in 1710. Smallpox was employed during the French and Indian War when Sir Jeffery Amherst traded smallpox-infected blankets to Indians loyal to the French. Because smallpox is a naturally occurring disease and infection can occur without malicious intent, it is difficult to determine the extent biological warfare played in the spread of disease. (Zajtchuk, 1997)

During World War I, German forces first effectively employed chemical warfare in 1915, releasing 150 tons of chlorine gas leaving 800 dead and 2,500-3,000 French and British soldiers incapacitated. Chemical agents were a major cause of casualties, accounting for up to 30% of all hospitalized battlefield patients. Fatality rates ranged from 2% in U.S. casualties, due to the effectiveness of protective masks, to 11.8% for Russian casualties. Although chemical weapons did not create significant fatalities, they presented a major medical and logistical burden for allied forces. (Zajtchuk, 1997)

Biological warfare is difficult to substantiate because disease outbreak could be attributed to natural causes. Allegations of biological warfare existed throughout World War I and II. In order to diminish U.S. domestic support of operations during WWI, Germans allegedly infected horses and cattle with anthrax and glanders before shipment to the United States. During WW II, the Allies as well as German and Japanese forces were suspected of using biological agents to launch epidemics on humans, animals, and crops. Documentation exists regarding biological agent experimentation done by German and Japanese researchers on prisoners of war. British experiments with small anthrax

bombs created contamination that lasted for more than 40 years on Gruinard Island off the coast of Scotland. (Zajtchuk, 1997)

More than 17 countries are known to engage in development of biological weapons. (Cole, 1997) The chemical agent ricin was used in a 1978 assassination of Bulgarian émigré and writer Georgi Markov. A Bulgarian operative used a weapon disguised as an umbrella to deliver the agent. A 1979 outbreak of anthrax in Sverdlovsk, located in the Ural Mountains of Russia, was reported as a naturally occurring epidemic. The suspicious incident centered around what was reported as a pharmaceutical production facility. It was confirmed as an accident at a military bioagent production plant in 1992. (Zajtchuk, 1997)

Carus provides evidence of an increase in bioterrorism in his report on *Bioterrorism and Biocrimes: The Illicit Use of Biological Agents in the 20th Century*. In ninety-three documented cases of illicit biological agent use or threat of use since 1900, sixty-eight cases occurred after 1990. Twenty-nine of the cases were reported in 1998. (Carus, 1998) Leading public health figures acknowledge the increasing threat. (Henderson, 1998)

The difficulty in confirming outbreaks as intentional events continues today. To date, the only confirmed use of bioterrorism in the United States occurred in 1984. The event, an outbreak of salmonella poisoning, was not confirmed as a bioterrorism event for more than a year after the "attack." The Rajneeshee, a religious cult living outside the city of Dalles, Oregon, planned to infect residents with salmonella on election day to influence the results of the county elections. Practicing for the event, they contaminated ten restaurant salad bars with salmonella bacteria. As the event unfolded, four or five

people initially presented complaining of fever and violent nausea. Within a week the number had risen to thirty. After two weeks nearly two hundred victims were stricken. The final toll was seven hundred and fifty one documented cases (nearly one tenth of the town) in a county that typically reports less than five cases per year. Although public health officials considered bioterrorism as a possible cause of the outbreak they thought it unlikely. It was not until more than a year later when the FBI was investigating the cult for other criminal violations that they discovered a vial of S. Typhimurium identical to the outbreak strain in a clinical laboratory on the cult's compound. Later, members of the cult admitted to contaminating the salad bars and putting salmonella into a city water supply tank.

A 1993 explosion at the World Trade Center complex in New York City left six people dead and more than one thousand injured. Fifty thousand people had to be evacuated from the building. The event was attributed to a religious redemptive group, the Jihad Organization, a radical Muslim terrorist entity. (Carus, 1997) The event was a tragedy brought on by a terrorist's use of a conventional weapon. Evidence of cyanide found at the site prompted speculation that there was a failed attempt to use chemical weapons to poison victims as they fled the building. If cyanide had been used effectively, the majority of the 50,000 evacuees would have become chemical casualties requiring immediate medical attention. (Betts, 1998) The one thousand injured in the blast placed a significant strain on the medical response community. Fifty thousand casualties would have overrun the medical care system. There would have been a need for supplementary help from the state or federal government. (SBCCOM, 1998)

In order to provide federal assistance to state and local jurisdictions, multiple legal and legislative initiatives have been enacted to protect the rights of local communities to govern themselves. The legal initiatives drive policy, providing guidance for the federal response to disasters and terrorist incidents. The federal support role is based on the premise that responding to a large-scale incident starts with a local area response protocol. As the requirements for managing the incident exceed local capability, state and then federal resources are called upon for support. Federal response, as a rule, is not called upon until local and state capability is exhausted. (FEMA, 1984)

LEGAL AND LEGISLATIVE BACKGROUND FOR FEDERAL SUPPORT

The legal basis for federal support to states comes from the U.S. Constitution. The 10th Amendment to the Constitution as part of the Bill of Rights protects the sovereign rights of the states. It specifies that those "powers not delegated to the United States by the Constitution, nor prohibited by it to the States, are reserved to the States respectively, or to the people." (Congress, 1776)

The civilian agencies within the federal government, not the military, have the primary responsibility to provide for the needs of citizens within the United States. In order to eliminate any proclivity toward military take-over, the Constitution places the military under civilian rule, with the President as Commander-in-Chief. (Congress, 1776) Laws governing the use of the military in domestic support operations are "complex, often subtle, and ever changing." Adding to the confusion are different statutory guidelines for different components of the military. The National Guard, both Air and Army, comes under legal authority and state jurisdiction unless federalized. As such,

some states place their emergency response operations under the control of the state-directed National Guard. (NICI, 1998)

The law governing the use of federal reserve components for domestic response is complex and frequently misquoted. Recent legislation permits the use of the federal reserve to respond to a genuine or suspected WMD event. It is significant to note that the Army has the preponderance of medical personnel and that 59% of the Army's medical capability resides in the Army Reserve.

One of the most misunderstood and misquoted legal guidelines for use of the military in domestic operations is the relationship with the military and the Posse Comitatus Act. Under Title 18 United States Code, federal military forces (National Guard under state authority is excluded) are precluded from engaging in domestic law enforcement activities. Very few constitutional and statutory exceptions exist. The focus of this review is medical support. Medical support is not an issue under Posse Comitatus. (NICI, 1998)

Because unique capabilities exist within the military, they are often called upon to support assist and support domestic operations. The review of legal authority for medical support will focus on those statutory guidelines that apply to military medical support.

In order for the federal government to provide support to states without violating their constitutional rights, the Robert T. Stafford Disaster Relief and Emergency Assistance Act of 1993 (PL 93-288) was enacted. The Stafford Act is the basis for all federal assistance to states in response to managing the consequences of domestic disasters. It authorized the President to establish a program for disaster preparedness and response. The act authorizes the President to provide DoD assets to support the disaster

relief effort after he formally declares an emergency. Additionally it provides for limited support prior to the declaration. Financial reimbursement to states for disaster relief activities drove the need for federal action. A primary intent of the Stafford Act was to provide a mechanism for federal reimbursement of costs related to disaster response. (Congress, 1993)

The Federal Emergency Management Agency (FEMA), under the Stafford Act, was assigned the responsibility to establish a mechanism to coordinate federal assistance to supplement state and local efforts and capabilities upon authorization of the President. (Congress, 1993) A relatively new organization, the Federal Emergency Management Agency was established by the President in March 1989 with Executive Order 12673.

The Federal Emergency Management Agency formulated the Federal Response Plan as an operational template to carry out federal support activities. (FEMA, 1992) The plan assigns responsibility for twelve categories of support to Lead Federal Agencies. Twenty-six federal departments and agencies and the American Red Cross played a part in developing the Federal Response Plan. They are assigned lead or support functions to carry out the plan. FEMA is the Lead Federal Agency in executing the Federal Response Plan. With the exception of the Corps of Engineers taking a lead role in public works and engineering, the role of the Department of Defense is in support of civilian federal agencies. (FEMA, 1998)

The original plan focused on natural disaster. A terrorism annex was added to the Federal Response Plan in 1998 to manage the complex issues surrounding the use of a weapon of mass destruction. As a template for federal action, the Federal Response Plan

is initiated only after being requested by civil authority within the affected state. Local and state planning is not addressed in the Federal Response Plan. (FEMA, 1998)

Increased awareness of domestic vulnerability to terrorism after the Tokyo sarin incident precipitated congressional and executive activity to improve capability to responde to the threat. Multiple legislative initiatives are driving change to a response system designed for natural disaster. (Assessment, 1993)

Presidential decision directives establish policy or order specific actions on the part of the President. They have the force of law. President Clinton signed Presidential Decision Directive (PDD) 39 establishing the United States Policy on Counterterrorism in 1996. In dealing with the consequences of a WMD attack, PDD-39 builds on and reinforces the broad responsibilities and relationships among the multiple federal agencies identified in the Federal Response Plan. PDD 39 operationalizes the interagency process through the assignment of a rapidly deployable interagency Emergency Support Team (EST) to provide required capabilities on scene in the form of a Domestic Emergency Support Team (DEST). It also defines and differentiates between the phases of response—crisis management and consequence management. (Clinton, 1995)

"Crisis management" is primarily a law enforcement responsibility involving the criminal activity surrounding a terrorist's use of weapons of mass destruction. Crisis management includes activities occurring before an event. Pre-incident activities come under the jurisdiction of the Federal Bureau of Investigation (FBI). "Consequence management" includes efforts to protect public health and safety, but extends to restore essential government services and provide emergency relief after an act of terrorism.

Coordination of the federal assistance to state and local governments for consequence management is jurisdictionally assigned to the Federal Emergency Management Agency.

The Defense Against Weapons of Mass Destruction Act of 1996 (PL 104-201, Title XIV), sponsored by Senators Nunn, Lugar, and Domenici, identified the findings of Congress on the issue of domestic readiness to respond, and mandated extensive activities to address WMD issues. It provided for: (1) a classified assessment on chemical and biological threats and capabilities of civilian agencies to respond; (2) identification of unmet training and equipment requirements of civilian first responders; (3) identification of DoD chemical and biological expertise and equipment that could be adapted to civilian requirements; and (4) detailed a plan for DoD assistance in training and responding to civilian first responder needs. (Congress, 1997)

Under the Nunn, Lugar, Domenici legislation, Congress directed the Secretary of Defense to carry out a program providing civilian personnel from federal, state, and local agencies with training on WMD emergency response. The Secretary of Defense directed the Army as the lead service for the program. The Army directed the Soldier and Biological Chemical Command to design and implement the program. The program's objective was to provide WMD response training to the largest 120 cities in the United States.

The five-year plan required separate chemical and biological response improvement programs. The emphasis of the programs was to identify gaps in current plans given the response requirements for a large-scale chemical or biological attack on the United States. The goal was to provide cities with integrated response plans to deal with the complex requirements of a terrorist's use of a chemical or biological weapons.

In 1998, President Clinton signed Presidential Decision Directive 62, Combating Terrorism. PDD 62 projects a systematic approach to fighting terrorism through the establishment of the office of the National Coordinator for Security, Infrastructure Protection and Counter-Terrorism. The intent of the office is to oversee the broad variety of relevant policies and programs including areas such as counter-terrorism, protection of critical infrastructure, preparedness, and consequence management for weapons of mass destruction. (Clinton, 1998a)

While legal imperatives precipitated change in the civilian community to realign capability to respond to the terrorist threat, multiple initiatives within the Department of Defense refocused many programs to improve coordination within its departments. In February 1994, the Secretary of Defense designated the Army as the Executive Agent for DoD to coordinate and integrate research, development, test, evaluation, and acquisition activities and military construction requirements of the military departments for the Chemical/Biological Defense Program. (DoD, 1993)

For medical nuclear, biological, and chemical (NBC) defense programs, the Army Medical Research and Materiel Command has the responsibility for planning, programming, and budgeting research requirements for all the military medical departments. The Assistant Secretary of Defense for Health Affairs is responsible for providing procedures and standards to implement the policy of participating in relief operations in major U.S. domestic disasters. Military departments coordinating the response to domestic activities are required to provide support to the extent compatible with U.S. national security. (DoD, 1996a)

In accordance with Public Law 104-106, National Defense Authorization Act for Fiscal Year 1996, the Assistant to the Secretary of Defense (Atomic Energy) was redesignated the Assistant to the Secretary of Defense for Nuclear and Chemical and Biological Defense Programs. Specific responsibilities were to insure close and continuous coordination between the non-medical and medical chemical and biological defense programs. (Congress, 1997)

In January 1999, the Chairman, Joint Chiefs of Staff, directed the Commander-in-Chief of Atlantic Command to develop a plan for a standing Joint Task Force for Civil Support. The Joint Task Force was designed with 36 key personnel who will provide the command and control of all military resources called to support the Lead Federal Agency in a domestic weapon of mass destruction event. A main objective of the Joint Task Force is to establish a plan to access the reserve components of all military services. Prior to the standing Joint Task Force concept, a Response Task Force performed the mission. The Response Task Force is organized from a pool of personnel with other full-time day-to-day activities. It is reconfigured for every event as required. (Garamone, 1999)

Changing legislative and policy decisions require jurisdictional change with intensively managed implementation plans. (Grange, 1997) The rapidly changing jurisdictional issues create difficulty in meeting expectations. Multiple General Accounting Office (GAO) reports site programs that have not met the expectation of the evaluators. (GAO, 1998a; GAO, 1998b; GAO, 1999) The rate of change to legal and jurisdictional responsibility for the response to a domestic incident creates a need for skillful change management techniques. Kotter suggests that the very nature of a bureaucratic and political environment is antithetical to rapid change. (Kotter, 1996)

The complex interrelationship among all the laws, directives, and implementation policies makes developing a coordinated response, using military and civilian resources in a coordinated way, a most challenging problem. The following section will discuss the key issues of implementation of the national disaster response policy.

FEDERAL DISASTER RESPONSE PLANNING AND IMPLEMENTATION

The Federal Response Plan uses a national security decision-making process referred to as the "interagency" to coordinate the responsibilities of the different federal agencies. The interagency process evolved from a World War II need to integrate the "instruments of power." (Marcella, 1999) The National Security Council established under the National Security Act of 1947 assists the President in making and implementing decisions to harmonize the supporting efforts of federal departments and agencies. (Congress, 1947) The challenge of the interagency is to coordinate the actions of diversified participants with differing agendas into effective implementation of policy. As the complexities of national policy grow, so do the complexities of integrating the multiple agencies within the federal government. (Marcella, 1999)

Under the Federal Response Plan, requests from states flow through their respective governors, requesting federal support. After presidential authorization, FEMA coordinates the response through the Lead Federal Agency. (Figure 2) The other federal agencies act in a support role to the Lead Federal Agency.

Figure 2 The Federal Response Plan Emergency Support Functions

#	1	2	3	4	5	6
Function	**Transportation**	**Communications**	**Public Works & Engineering**	**Firefighting**	**Information & Planning**	**Mass Care**
Responsible Agency	Department Of Transportation	NCS	DoD, Corp of Engineers	USDA: Forest Service	FEMA	ARC
Supporting Agencies	USDA, DOD, DOE, DOS, GSA, ICC, TVA, USPS	USDA, DOC, DOD, DOI, DOT, FCC, FEMA, GSA	USDA, DOC, DOE, DHHS,DOI, DOL, DOT, DVA,EPA, GSA, TVA	DOC, DOD, DOI, EPA, FEMA	USDA, DOC, DOD, DOE, DHHS, DOI, DOJ, DOT, TREAS, ARC, EPA, GSA, NASA, NCS, NRC, SBA	USDA, DOC, DOD, DHHS, DHUD, DOT, DVA, FEMA, GSA, USPS
#	7	8	9	10	11	12
Function	**Resource Support**	**Health & Human Services**	**Urban Search & Rescue**	**Hazardous Material**	**Food**	**Energy**
Responsible Agency	General Services Administration	Health and Human Services: Public Health Service	Federal Emergency Management Agency	Environmental Protection Agency	USDA; Food & Nutrition Service	DOE
Supporting Agencies	USDA, DOC, DOD, DOE, DHHS, DOL, DOT, DVA, FEMA, NCS, OPM	USDA, DOD, DOJ, DOT, DVA, AID, ARC, EPA, FEMA, GSA, NCS, USPS	USDA, DOD, DHHS, DOL, DOT, AID, EPA, GSA	USDA, DOC, DOD, DOE, DHHS, DOI, DOJ, DOL, DOS, DOT, FEMA, GSA, NRC	DOD, DHHS, DOT, ARC, EPA, FEMA	USDA, DOD, DOS, DOT, GSA, NCS, NRC, TVA

AID	Agency for International Development
ARC	American Red Cross
DHHS	Department of Health and Human Services
DHUD	Department of Housing and Urban Development
DOC	Department of Commerce
DOD	Department of Defense
DOE	Department of Energy
DOI	Department of the Interior
DOJ	Department of Justice
DOL	Department of Labor
DOS	Department of State
DOT	Department of Transportation
DVA	Department of Veterans Affairs
EPA	Environmental Protection Agency
FCC	Federal Communications Commission
FEMA	Federal Emergency Management Agency
GSA	General Services Administration
ICC	Interstate Commerce Commission
NASA	National Aeronautics and Space Administration
NCS	National Communications System
NRC	Nuclear Regulatory Commission
OMP	Office of Personnel Management
SBA	Small Business Administration
TREAS	Department of Treasury
TVA	Tennessee Valley Authority
USDA	US Department of Agriculture
USPS	US Postal Service

Health and medical services fall into Emergency Support Function # 8. The Lead Federal Agency is the Department of Health and Human Services (DHHS), U.S. Public Health Service (USPHS). The lead policy agent is the Deputy Assistant Secretary for Health. The action agent is the Office of the Assistant Secretary for Health, Office of Emergency Preparedness. As such, the Director of the Office of Emergency Preparedness is responsible for implementation and coordination of all federal medical response. Supporting organizations participating in the health and medical services contribute to the overall response, but retain full control over their own personnel and

resources. (FEMA, 1992) DoD policy supports the premise that all military assets are under the command and control of military leadership. (DoD, 1996b)

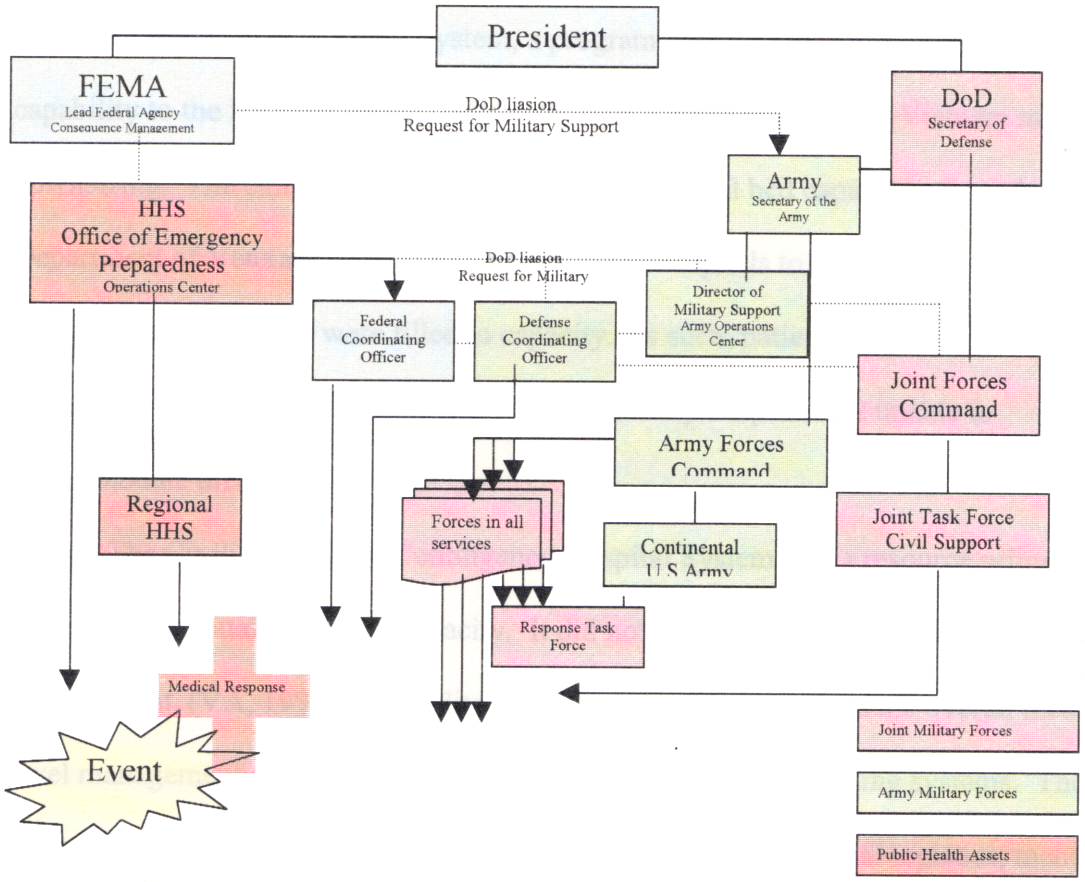
The Office of Emergency Preparedness supports local agencies in identifying and meeting the health and medical needs of victims of a major emergency or disaster. The Department of Health and Human Services is responsible for initiating the action to provide technical assistance and provide health and medical services response. It directs, coordinates, and integrates overall federal medical assistance; provides incident-site management; activates Disaster Medical Assistance Teams (DMAT) and other specialty teams; and activates the National Disaster Medical System (NDMS). (DHHS, 1996; FEMA, 1992)

Initially, the Department of Health and Human Services provides supplemental assistance to identify and meet the health and medical needs of victims. DHHS has the responsibility to fulfill the requirements identified by state and local jurisdictional authorities. (FEMA, 1992) Resources available to DHHS are their internal resources from the public health system, supporting departments and agencies such as the Department of Veterans Affairs and the Department of Defense, and non-federal sources. (DHHS, 1996)

Upon notification of a significant domestic disaster or event that overwhelms state and local authorities, the DHHS Emergency Operations Center activates with representation from each supporting agency. FEMA has overall responsibility to coordinate the response for managing the consequences of the event. A Defense Coordinating Officer assigned by the Director of Military Support coordinates the military response until a Response Task Force is assigned. The Defense Coordinating

Officer facilitates requests for military assistance through the Director of Military Support in the Army Operations Center. (Figure 3)

Figure 3 Relationship between DHHS and military medical support assets



The primary operational medical response system is the National Disaster Medical System (NDMS). The National Disaster Medical System is a mutual aid program for federal, state, and local healthcare support. It is a partnership between the Department of Health and Human Services, the Department of Defense, the Department of Veterans Affairs, the Federal Emergency Management Agency, state and local governments, and the private sector. Although resources managed within the NDMS system are activated through the same formal process in disaster response, the NDMS system can be activated directly by the Director of the Federal Emergency Management

Agency or the Assistant Secretary of Health, Department of Health and Human Services, in response to a U.S. domestic disaster. (DoD, 1996a)

The concept for the National Disaster Medical System evolved from the Civilian-Military Contingency Hospital System, a program designed to provide expansion capability to the Department of Defense medical system during post-Vietnam military downsizing. The contingency plan provided for hospital bed capability from the Department of Veterans Affairs and from civilian hospitals to support casualties of war when military hospitals were filled to capacity. As such, patients returning to the United States would be assured of a hospital bed if a military hospital was unable to accommodate them. (VA, 1999)

The Civilian-Military Contingency Hospital System was a resource primarily focused on hospital bed surge capacity. It did not address other elements of medical management. (VA, 1999) The military medical system maintained the overall theater level management of other functional areas known as battle operating systems. These systems consist of: command and control, communications, medical logistics, mental health, dental support, veterinary service, preventive medicine, health services support facilities, area support, and evacuation. (DoD-Army, 1991)

The NDMS was designed to provide supplemental health and medical assistance at the request of state and local authorities, evacuate patients who could not be cared for in the disaster area, and provide hospitalization through its network of civilian, Veterans Health Administration (VHA), and military hospitals across the nation. The system assigns management to ten Federal Coordinating Centers (FCC) located within the

FEMA regional areas. Management is assigned to a military or VHA health care system within the region. (VHA, 1999)

The focus remains primarily on hospital bed surge capacity and evacuation of patients out of the disaster site. The early nineties brought the concept of a civilian mobilization response capability referred to as a Disaster Medical Assistance Team (DMAT).

The Disaster Medical Assistance Team (DMAT) is the primary medical response for the NDMS. It is made up of 35-37 volunteer medical care providers. No definitive information exists on their capability to handle a specific number of critical patients. They arrive at a disaster site with enough supplies and equipment to be self-sufficient for seventy-two hours. DMATs provide triage capability as well as casualty clearing and staging capability. (VHA, 1999)

When hospitals exceed their capability and cannot meet the demands of the continued medical casualties, the NDMS provides the resources to evacuate stable patients to another state thus allowing for hospital beds to meet acute care needs. The system relies on military aeromedical evacuation assets to move patients. Definitive medical care begins as patients arrive at the reception airfield. (VHA, 1999)

Little reference is made in DoD policy and regulations to participation in the National Disaster Medical System. DoD Directive 6000.12, *Health Services Operations and Readiness,* dated 1 January 1998, addresses NDMS in paragraph 4.9. The directive acknowledges the system as a mutual aid organization, reinforcing the mission to respond to a U.S. domestic national emergency or military conflict. It identifies the activation

authority and states "Department of Defense Components shall participate in relief operations to the extent compatible with U.S. national security." (DoD, 1996a)

The National Disaster Medical System focus is federal support to local communities as they assist citizens from another community who require definitive medical attention. A VHA guide to NDMS identifies response to earthquakes and small-scale sabotage as the worst-case scenario for planning purposes prior to the 1991 revision. The current guide recommends awareness of bioterrorism as a possible scenario. (VHA, 1999) (DHHS, 1996)

Criticism exists over the integration of medical assets to support domestic terrorism. In 1999, opening remarks to a hearing on Medical Responses to Terrorist attacks, Representative Christopher Shay reported, "despite significant efforts to combat terrorism and improve national readiness, medical response capabilities are not yet well developed or well integrated into consequence management." (Shays, 1999) A General Accounting Office report on public health and bioterrorism identifies the need for a threat and risk assessment. The report suggests that the Public Health Department should not build capabilities for a worst-case scenario, but rather focus on response for more likely events. The GAO expresses concern for issues of financial feasibility and sustainability of a capability that may never be used. (GAO, 1999)

Peter Schweizer, in a 1999 article in USA Today, addressed a public concern that the military should not be in charge of domestic support operations. He fails to make a distinction between being in charge of, versus being in support of, domestic response operations. Mr. Schweizer, a research fellow at the Hoover Institution, raises issues related to law enforcement roles of the military. He sites combat-arms surveys

highlighting concerns that military cohesion would break down if military members were ordered to fire on U.S. citizens. His reference to combat-arms and law enforcement are crisis management functions of domestic response, under the control of the FBI.

Mr. Schweizer uses his logic for crisis management and crosses over to consequence management. He paraphrases Mr. James Witt, Director of FEMA, as saying "he 'philosophically' disagrees that the military should be the institution with such responsibility." FEMA is the Lead Federal Agency for consequence management. Mr. Schweizer again fails to make the distinction between being in a lead role and a support role.

Additionally, Mr. Schweizer addresses military readiness for overseas missions. Because he assumes any military involvement is in a lead role, he assumes the mission requirements will detract from primary mission readiness. Deputy Secretary of Defense Dr. John Hamre points out that the same skills are used for combat support missions in medical response to overwhelming biological casualties. (Hamre, 1999; Schweizer, 1999)

Dr. Hamre repeatedly reinforces his position that the military should not be in the lead during domestic operations. He does, however, forcefully defend the critical role of military support in providing surge capacity for catastrophic events. He refers to the capability of military medical assets to work efficiently and effectively given the highly critical nature of war or catastrophic domestic terrorism. The military has the capability to rapidly move to a disaster site and immediately provide care. The personnel and equipment necessary to support a domestic bioterrorism medical operation is a part of the military war-fighting inventory. The military reserve is already located within the civilian communities. Hamre identified the reserve components as the military lead in

WMD domestic support operations. The military must know how to integrate into the domestic support for bioterrorism when requested to do that. (Hamre, 1999) A change in the law, Title 10, section 12304, allows for the use of the federal reserve to be called to active duty to respond to a WMD or suspected WMD event.

Response scenarios are being developed to identify the requirements and the existing capability to respond to a bioterrorism event. (SBCCOM, 1998) Projections for evolving challenges to the medical response system are based on epidemiological data extrapolated from naturally occurring disease. The requirement for medical management for intentional biological contamination will be comparable to a naturally occurring epidemic. The primary difference lies in the accelerated rate at which the casualties present themselves. The Centers for Disease Control and Prevention suggest that early identification of a bioterroism event requires differentiation from a naturally occurring disease. That will be difficult. It may be days or weeks into the event before confirmation of an intentional exposure can be unequivocally confirmed. What is paramount to the response community is that as the numbers of patients presenting with similar symptoms grows, the epidemic proportions will trigger a response. (Hughes, 1998)

The medical response to a large-scale bioterrorism event is based on the number of victims and the severity of their symptoms. Response to a medical emergency of the potential magnitude projected for a bioterrorism event has not been seen in the United States since the influenza epidemic of 1918. Statistics for the United States indicate that in less than ten months, 550,000 people—who otherwise would have lived—died from Spanish influenza. To put that in perspective, the combined battle deaths from World War I, World War II, and the wars in Korea and Vietnam were 423,000. Fatality rates for

Spanish influenza in the civilian population was three times higher than the previous year. The Army's death rate was seven times higher. Although expected to be a gross underestimation, the commonly quoted worldwide mortality rate from Spanish influenza was 21 million. Unconfirmed estimations cite the mortality rate in India alone as 20 million. (Crosby, 1989)

The magnitude of casualties generated by the 1918 influenza pandemic suggests a need for a response plan that would be similar to the requirements of a bioterrorism event. Suggestions before the U.S. Senate recommend the basic plans for public health response to bioterrorism should mirror a response to catastrophic naturally occurring disease. (Hughes, 1998)

The preponderance of large-scale medical response planning to date focuses on the natural disaster and the chemical threat. It is imperative to also plan medical response against a bioterrorism scenario. (SBCCOM, 1998). Medical response to biological scenarios differs from chemical and natural disasters in a number of ways. Biological agents can be delivered surreptitiously. It may be days before victims become ill. The "first responder" who rushes in to provide first aid in most attack scenarios will not be the first caregiver in a biological event. What you have in a biological scenario is a lot of people who feel as though they have the flu rapidly descending on the health care system. (Franz, 1997; Friedlander, 1993; Henderson, 1998; Zajtchuk, 1997)

BIOLOGICAL TERRORISM RESPONSE

An unclassified bioterrorism scenario developed for ABC News serves as a platform to identify issues related to the need and the follow-on requirement for

optimization of overwhelming response assets. In the fictional scenario, an anthrax release occurred in a large city's subway system, contaminating a significantly large number of potential victims. Unlike chemical attacks in which victims immediately feel the effects of the agent they are exposed to, in biological attacks victims remain unaware of their fate for three to six days. As symptoms begin to emerge, the first reaction of most victims will be to take an over-the-counter medication and go to bed. After all, it feels like just a cold. Some will seek medical care from their personal physician, emergent clinics, or the emergency room. The numbers of victims will spread throughout the city, the county, and the regional area. During the days after exposure, the victims go about their daily business. They go home, to work, on vacation, anywhere a busy city's citizens might travel in three to five days. Nearly twenty percent of those infected will be in different states or countries before symptoms appear.

On the morning of the fourth day after exposure, hundreds of victims will be seeking medical care throughout the world. By midday nearly half of those seeking care will be admitted to hospitals. The numbers will rise to nearly two thousand by midday. Individual hospitals, especially those near the heaviest concentration of subway users, will be extremely busy. Areas of heavy concentration will begin to question the cause beyond a diagnosis of influenza. By the end of the day, a total of 3,600 will be ill with nearly 100 fatalities. A chemical event would have been recognized and already precipitated a crisis response as well as mass casualty management. A terrorist event would have been declared, HHS would be engaged, and requests would be in motion to activate military medical support capability.

But these bioterrorism victims are spread out across the country, and few will suspect anything but a heavy flu season. Even then, the numbers will begin to slow down and investigators, hoping for the best, will consider that the event may be coming to an end. The early victims of anthrax are starting into stage two of the disease.

The response begins to grow when hospitals request their staff to work overtime. Public health reports of the unexpected deaths will come in from across the United States. If the area of primary impact has a sophisticated health surveillance reporting system, it will have some awareness that something unusual is happening. However, nearly one half of the public health departments do not have access to the Internet. Communication is a focus for improved performance. (CDC, 1998) Local health systems may not have any comprehension of the magnitude of the problem until the media starts to report.

By the end of the day, multiple emergency response activities occur simultaneously. The suspicious public health community activates its preparedness protocols. The law enforcement and crisis response communities initiate investigatory action. Emergency operations centers are alerted and prepared for action. The Office of Emergency Management, U.S. Public Health Service, activates a 24-hour operations center. Notifications to immediate response teams prepare them for mobilization. The Director of the Office of Emergency Management requests military medical support from the Director of Military Support. The Director of Military Support submits the request for validation of appropriate criteria to engage military personnel. At the same time, an evaluation of the exact requirement is done to identify the types of units or personnel appropriate to fill the need. (Fitton, 1999)

Early on day five, the news media reports any information it can gather to stay on top of the news. Communities seeking support cover a large regional area. All communities are requesting the same kinds of resources to support their response efforts. Governors from at least three states activate the National Guard and request presidential support. The President declares a disaster; although a suspicion of terrorism exists, there is confusion as to what legal precedents exists for utilizing different federal assets. This still could be a naturally occurring epidemic of influenza. The FBI and FEMA are engaged. Law enforcement personnel are investigating any possible lead on terrorism. Questions exist over who is in charge. Over 10,000 victims are ill throughout the tri-state region; fatality rates at 350 in the early morning double by noon. By evening deaths reach 1000. The diagnosis is confirmed as anthrax. The diagnosis in turn confirms that terrorism laws apply. It is unclear where the exposure took place. Public concerns of exposure precipitate four times the actual exposed victims or nearly 40,000 additional people seeking treatment. These "worried well" add significant stress to the overwhelmed system.

Additional requests for medical assistance are sent through the Director of Military Support to Forces Command to identify the specific organizational element for response. Tremendous medical support is requested. The number and types of support are ambiguous. As one city health manager was reported to have said, "we haven't thought this thing through.... I don't know how much I need, I just know I need a lot. Pick a number, give me a thousand nurses." (Socher, 1999)

On day six, two days after victims first reported symptoms, 30,000 people are ill. Nearly half are critical. Deaths are occurring at the rate of 500 per hour. City morgues

are overwhelmed. They need refrigerated units to use as temporary morgues. The cumulative death toll attributed to anthrax climbs to 15,000. Some hospital personnel are ill; others are exhausted. Disaster Medical Assistance Teams arrive. They support the local medical system to the best of their ability, but there is still not enough medical help. The hospitals are unable to meet the needs of the overwhelming number of critically ill. The cities are using designated shelters to care for victims. Victims are dying faster than they can be moved.

On days seven and eight, the death toll reaches 25,000 and 50,000 respectively. The communities are in chaos. All Health and Human Services assets are engaged. All civilian deployable assets are on location. Their personnel are exhausted; they are out of supplies. Military medical units arrive to support. In the absence of clear direction on how to integrate with the civilian system, they immediately set up their own system of treatment. Precious time is lost in coordinating the placement and integration of military assets.

MILITARY MEDICAL SUPPORT

The military response in the hypothetical bioterrorism scenario followed a process utilized during military support to civilian authorities during hurricanes. The activation process called on active forces, citing that the federal reserve components were too slow to deploy. But in the final analysis, response to Florida's hurricane Andrew, the largest number of volunteers came from Army Reserve personnel acting in a non-military capacity. They were there as soon as the media reported a need for medical support. Their military skills coupled with their civilian skills made a significant difference in

providing for triage and treatment at the tactical level. But their response was not coordinated. They were not recognized as a viable option for early response. (Anonymous, 1998)

Differences exist in battlefield medicine and domestic disaster response. Working in the domestic environment dictates that the military medical commander must have situational awareness and understand the "rules of engagement," a term used to define the legal limits of activity in a given mission. In the case of military support providers, operating in the domestic arena requires a thorough understanding of the public health system as well as the civilian medical system. Casualty care may be the same, but military doctrine on command and control provides for the integration of health service support functions necessary for optimal patient care and survival. (DoD-Army, 1991) The NDMS system focuses military medical support on evacuation and hospitalization, with little attention to other functional components of theater medical support. (DoD, 1996a)

The Army's medical health services support functions include command and control, hospitalization, evacuation, health services logistics, medical laboratory, blood management, veterinary services, preventive medicine, dental services, and combat stress control. The senior medical command provides the command and control structure to optimize the medical aspects of the battlefield. The military system of medical management defines planning factors with clearly delineated response parameters. (DoD-Army, 1994) Military medical planning has not addressed these factors as they relate to domestic response.

The challenge facing the United States is that a terrorist event may occur without warning, allowing no time to prepare. An event that requires exceptional resources not

routinely in the hands of the local community would be devastating. The Department of Defense is the only organization that has the flexibility and the capability to meet the requirement if it happens. However, DoD is not presently organized to do that. (Hamre, 1999)

The review of literature on military medical support to domestic bioterrorism identifies a requirement for rapid access to appropriate federal assets with improved interoperability. All emergency response starts as a local event managed through the local emergency management agency, generally the police or fire departments. The mayor or responsible local authority requests assistance from the state through the governor. When the state assets are overwhelmed, the governor requests assistance through the President as prescribed in the Federal Response Plan. Local public health departments can initiate the process to access federal medical support. The requests must be validated through state and regional public health department channels. (FEMA 1992)

III. METHODOLOGY

Theoretical Framework

This research examines the issues surrounding the optimal use of military assets to support medical response to a domestic biological warfare event. The review of the literature on domestic military medical support paints a picture of an event that requires improved integration of military medical assets. This research examines these issues and concludes with a description of the barriers to optimal use of military assets in domestic response to bioterrorism.

The key areas of discontinuity are:

1. Biological attacks lack an immediately identifiable event that will prompt a request for military medical response
2. Military resources are focused on mobile response to soldier's needs under battlefield conditions; civilian responses are primarily fixed, focused on peacetime needs
3. Military command and control systems are very different from civilian control systems
4. The policy is not well integrated across local, state, and federal jurisdictions or across government agencies

An open-ended interview process was used to provide comprehensive insight into the issues at the senior level of government. Through inductive analysis of the data, research results will be presented.

Study Design

This is a qualitative research project, using descriptive and interpretive methods. Interviews were conducted with senior leaders in military and civilian federal agencies. Their expertise in military support to the civilian medical community provides a current assessment of the barriers to the use of Department of Defense medical assets in support of federal, state, and local authorities to mitigate the consequences of domestic biological terrorism. The purpose of the design is to achieve consistency and structural corroboration of themes emerging from interviews with key decision-makers. Internal validity will be maintained through triangulation of multiple sources of data. (Rudestam, 1992)

Through a holistic and inductive approach, naturalistic inquiry was used to elicit underlying issues affecting domestic civil-military relations during domestic response to the overwhelming effects of bioterrorism. Themes derived from interviews with senior civilian leaders and key military personnel were corroborated with phenomenological observations documented in field notes and written sources (laws, news articles, congressional testimony, reports, etc.). (Rudestam, 1992) Revisions to the emerging themes continued throughout the process as more data became available. This study employed an ethnographic design to capture the specific aspects of civilian-military roles and relationships. The data derived through the open-ended interview questions provide a descriptive explanation of the current environment, existing gaps in policy and planning, and the cultural and organizational interrelationships of the different organizations. (1991) This leads to a psychologically rich, in-depth understanding and description of the issues underlying the changing environment. The conceptual

framework of the study is bounded by criteria identified by Miles and Huberman as graphic "bins." (Miles, 1984) The labels for the bins include events, settings, processes, and theoretical constructs. This study is focused on the medical response to bioterrorism (event), the domestic threat (continental United States—setting), the military role in supporting federal, state, and local authorities (processes), and authority relations and organizational norms (theoretical constructs).

With purposive sampling in naturalistic design (Lincoln, 1985) I selected nine key personnel from the policy leadership population in civil-military and medical disaster response. These individuals include senior officials in the Department of Defense, Federal Emergency Management Agency, and Department of Health and Human Services. (Appendix I: Subjects Interviewed) The focus was on the individual in order to gain the full complexity of the individual's experience.

The interview process was developed to elicit open and honest responses and initiate dialogue. Based on a review of existing literature (laws, news articles, congressional testimony, reports, doctrinal relationships etc.), questions were formulated to facilitate broad discussion on the current system of military engagement in the domestic arena, the changing threat, roles and expectations, and insights into second- and third-order effects of change. (Rudestam, 1992) (Appendix III, : Interview process) As described by Rudestam and Newton, there was no fixed agenda. Scientific rigor was maintained through the use of audio taping in the process of the interviews. (Rudestam, 1992) The interviews followed the following line of questioning:

1. Do you believe that the Department of Defense has a role in the scenario I described?

2. Define role of DoD; how much, how fast? Does the current configuration work? Mr. Hamre, Deputy Secretary of Defense has said that the reserve components are the forward deployed force for domestic response, how do you think they fit into the overall response?

3. What do you think the public expects?

4. How do you think the military as a whole views their role?

5. What is your perspective on what works well and what doesn't work within the current role of DoD in the Federal Response Plan?

6. How do you perceive the changing threat from conventional warfare to terrorism in regard to the DoD mission to fight and win the Nation's wars; What does it mean to the medical mission to "support the fighting strength?"

7. Identify your greatest challenge with DoD response.

8. Given what you have alluded to, what do you think needs to be changed to improve response in this new environment? If those recommendations are adopted, how might that affect other aspects requiring military support?

9. Would you like to comment on any issues we have not discussed?

Data Collection

Data collection started with a review of existing laws, news articles, congressional testimony, reports, doctrinal relationships, etc., along with field notes from personal conversations and meetings. This information is reported in Chapter 2. Additional data were collected during nine in-depth interviews, averaging 1.5 hours each. The procedure for conducting each interview started with a contact to the participant's office, identifying the intent of the research, and requesting a meeting to conduct an interview. Prior to the interview, written letters of intent along with an outline of the procedure were sent.

The interviews took place in the subject's office. After a review of the procedure outlined in the letter preceding the interview, a summary of underlying values,

assumptions, and expectations were sent. These underlying values, assumptions, and expectations are summarized:

> The threat of bioterrorism is real. The response to a bioterrorism event must be timely in order to improve expected outcomes. Federal assets should be designed to support states when they are overwhelmed. This study will process the data that you provide through triangulation, a process that corroborates what you say with multiple sources of data from other senior leaders, written investigators, written records, and field notes.

An audio tape recorder was used to assure a complete record of each interview.

Data Analysis

The raw data derived from the interview process were coded to identify themes through a technique of inductive analysis, unitizing and categorizing. Through the "constant comparative method" described by Glaser and Strauss (1967), the data were categorized into units in an ongoing fashion. The units were determined by their relative content. Propositional statements characterizing the category's properties emerged. Rules for inclusion in the categories evolved during the categorizing process. The rules provide a basis to confirm the inclusion of units in the appropriate category, thus providing internal consistency. The units were then titled to convey the basis of the rule for inclusion. The process continued until the addition of units into a category provided no new information. The criteria described by Lincoln and Guba (1985) was used to

determine when to stop collecting and processing data: exhaustion of sources, saturation of categories, emergence of regularities, and over extension.

In the same way that raw data from the interview process are coded to identify themes. Data derived from field notes, conversations, and meetings were analyzed into coherent patterns. The results were used for structural corroboration and triangulation of the emerging themes as they related to the interviews.

Results are presented through models to convey the analysis of data. They are in the form of context charts and causal relationships. The key issues preventing optimal integration of appropriate military support in catastrophic domestic bioterrorist incidents are presented. This pattern of analysis supports conclusions drawn from the evolving themes.

Definition of Terms

Biological Agents: microorganisms or toxins from living organisms that have infectious or non-infectious properties, which produce lethal or serious effects in plants and animals. (FBI, 1995)

Consequence Management: measures to protect public health and safety, restore essential government services, and provide emergency relief to governments, businesses, and individuals affected by the consequences of terrorism. The laws of the United States assign primary authority to the states to respond to the consequences of terrorism; the federal government provides assistance as required. (Clinton, 1995)

Crisis Management: measures to identify, acquire, and plan the use of resources needed to anticipate, prevent, or resolve a threat or act of terrorism. The laws of the United States assign primary authority to the federal government to prevent and respond to acts

of terrorism; state and local governments provide assistance as required. Crisis management is predominantly a law enforcement response. (Clinton, 1995)

Terrorist Incident: A violent act, or an act dangerous to human life, in violation of the criminal laws of the United States or of any state, to intimidate or coerce a government, the civilian population, or any segment thereof, in furtherance of political or social objectives. (FBI, 1995)

Weapon of Mass Destruction: (A) Any destructive device as defined in section 921 of Title 18 U.S.C. (which reads) any explosive, incendiary, or poison gas, bomb, grenade, rocket having a propellant charge of more than four ounces, missile having an explosive or incendiary charge of more than one quarter ounce, mine or device similar to the above; (B) poison gas; (C) any weapon involving a disease organism; or (D) any weapon that is designed to release radiation or radioactivity at a level dangerous to human life. Research supports that cyberterrorism and other acts creating catastrophic outcomes could and should be added to the list of weapons of mass destruction. (FBI, 1995)

First Responder: The first person or group of personnel responding to the scene of an emergency. Refers to incidences where an event is easily recognizable, as in an explosion or chemical release. May not be appropriate in biological release. (SBCCOM, 1998)

Delimitations

This study focuses on the processes at the federal level within and between the senior agencies of the federal government. These agencies are generally referred to as the interagency. It further identifies operational issues as a result of national policy. It focuses only on the issues affecting military medical support as they relate to the federal

response. It does not address any affiliation or relationship between the Department of Defense and local or state organizations or agencies.

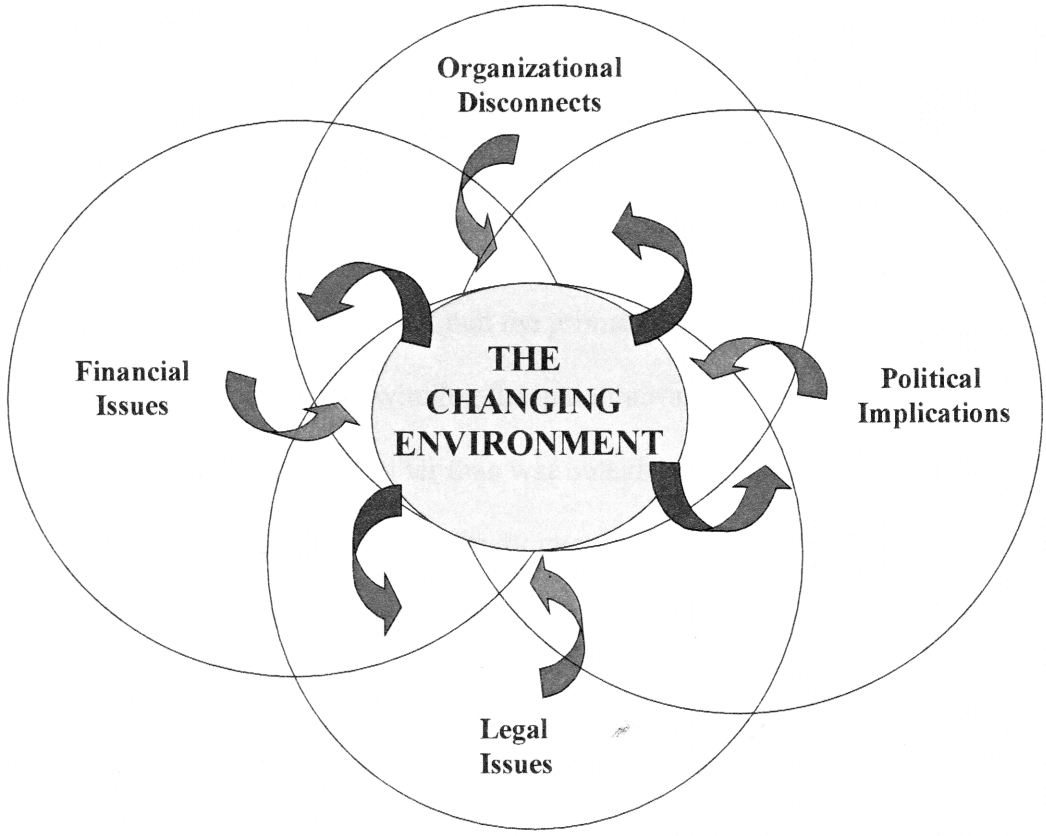
IV. RESULTS

The data collected from the interviews were categorized into five crosscutting constructs that described the essence of the interviews. These constructs were developed through review of the emerging issues from the interviews. The issues were categorized into like units until the five basic categories evolved. They all included elements of the **changing environment.** That became the centerpiece of the other four categories. The **organizational disconnects** revolved around the responses that reported a lack of continuity with the other organizations. Many were focused on lack of awareness or understanding of the way the other side conducts business. The **political implications, financial issues,** and **legal issues** were those responses that were common to all and focused on the respective categories and how they influenced decision-making and the environment.

Interviewee responses centered on the **changing environment** and the evolving policy for responding to bioterrorism events. The new requirements for corroboration between different interagency partners led to **organizational disconnect**. Coordinating response was handled differently by the agencies involved; there was confusion reported as to who was in charge of specific activities, leading to an inability to fully coordinate activities with the other agencies' responsible parties. The new threat was highly visible, precipitating **political** concerns. The new programs that would be necessary to respond

to an attack with a biological weapon drove **financial** concerns within the government. The final crosscutting construct was the **legal** basis for the use of military assets within the continental United States. Interviewees indicated that these relationships, while addressed by the legal system, have significant ambiguities. The complexities and interactions of the constructs are depicted in Figure 4.

Figure 4 Complexities and interactions of crosscutting constructs



The interface between the U.S. Department of Health and Human Services and the Department of Defense was identified as the focal point for issues regarding the use of military medical assets for domestic support. The new requirement for bioterrorism response forced both organizations to operate in an environment that was quite different

than their traditional environment. A description of the **changing environment** is seen in Figure 5.

Figure 5 The changing environment for bioterrorism

DoD Environment	
Previous	**Evolving**
War	Bioterrorism
Outside U.S.	U.S.
Internal operations	Interagency Operations
Combat focused	Combat service support (Medical) focused
Defined Mission	Implied Mission
Reactive Civil Support	Proactive Civil Support
Active Component in the lead	Reserve Component in the lead

HHS Environment	
Previous	**Evolving**
Natural Disaster	Bioterrorism
U.S.	U.S.
Interagency Operations	Increasing Interagency Operations
Internal capability to meet requirements	Potential for overwhelming requirements

The respondents pointed out that the primary focus of the Department of Defense is traditionally on fighting and winning the nation's wars. One respondent pointed to an increase in military operations other than war outside the United States, but identified that the international military was their primary interface. Contrary to domestic support operations, the international military forces were described as "speaking the same language" and having similar values as the U.S. military. The need to improve interagency cooperation was identified frequently. Additionally, the traditional military focus is on the combat force. Military interviewees pointed to the medical role as support for combat missions. Bioterrorism was perceived as "not stopping the bad guys" and interpreted as a failure of military might. It was also stated that it was out of character for the medical mission to come before the combat mission. Because it was not assigned as an official mission, domestic support was reported as a "distracter" to military training. Without a planned mission, any response was reactive. A response task force would be

organized for each major response, creating new requirements and solutions each time the organization was formed. The respondents expressed optimism that the newly organized task force with civil support as a full-time mission would more clearly define the civil support mission. However, it was reported that the changes precipitated new roles and responsibilities for those gaining control as well as those losing control. The overlapping roles and responsibilities during the transition period would increase ambiguity and create turf struggles.

Another major change internal to DoD was the focus on utilization of the reserve components. The active U.S. military force generally leads missions outside the United States. The National Guard in their state role leads domestic missions. The need for medical assets that were predominantly in the Army Reserve was seen as a major change. The federal reserve components were perceived as too hard to access. The limited requirements for medical support in the past were met with active component resources. This was not perceived as a realistic option for bioterrorism response given the downsizing of the force.

The Office of Emergency Preparedness, Department of Health and Human Services (DHHS), was identified as the focal point for the changing requirements for the National Disaster Medical System (NDMS). The system, as the backbone for DoD medical integration, focused DoD requirements on hospital beds and transportation. The need for overwhelming numbers of response personnel and more comprehensive support packages from DoD was not addressed in the past and identified as a significant change. Although DHHS engaged in interagency activity, the increasing requirements for interagency cooperation for assets beyond those provided by core members of the NDMS

were an added change. The changing requirement for committed DoD assets was identified as a need for strategic planning for integration of medical support operations.

The **organizational disconnects** between DoD and civilian agencies fell into three major categories. Respondents reported organizational disconnects resulting from differences in organizational **culture**, **doctrine**, and **experience and awareness**. (Figure 6) **Cultural** disconnects were attributed to the military "take charge" mentality, which was antithetical to the prevalent culture within the civilian community.

Figure 6 Organizational disconnects

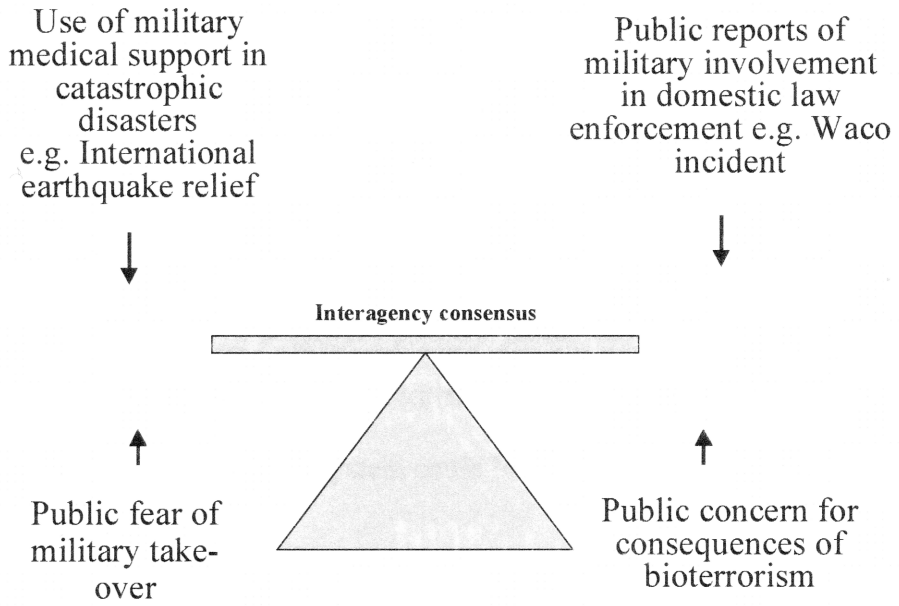
	DoD	Civilian
Culture	**"Hooah" or take charge mentality**	**Laid back/less formal structure**
Doctrine	• Clear command and control • Domestic medical support secondary to primary mission	• Ambiguous command and control • Evolving doctrine on military role
Experience and Awareness	Combat casualty management No experience with civilian	Disaster casualty management No experience with military

Doctrinal disconnects emerged, as the respondents reported no in-depth knowledge of the way the other side works. Military members reported a prescribed doctrine in military medical management, while public health officials identified that doctrinal management for civilian bioterrorism was evolving and was not yet written. Multiple overlapping and conflicting support agreements were reported. As one respondent commented, he knew the NDMS agreement for DoD support and it was irrelevant to him what other agreements might be in place. The respondents reported the existence of numerous informal relationships that developed when requirements needed to be met. The lack of a clear command and control structure in the civilian environment was a significant issue for military leaders.

The difference in **experience and awareness** about the way the other side worked created organizational disconnects. There were conflicting reports in reference to the transferability of medical response experience. One senior medical leader reported no 1:1 parallel in experience between war and domestic crisis response. A non-medical military leader expected that the medical response would probably be pretty much the same. There was a perception that the issues were very different at the strategic, operational, and tactical levels. It was reported that no mainstream training requirement exists to educate either side on understanding and working with their partners. (Figure 6)

The **political** implications for the use of military assets to support domestic bioterrorism were reported as a critical factor. Reference was made repeatedly to the need for interagency coordination to support political decision-making. (Figure 7) Respondents repeatedly referenced the concern for the perception of the military takeover and a siege mentality as portrayed in the media. It was reported as paralyzing the political process. Concern was voiced about the effect the popular media has on perception of military involvement and how it drives public opinion. All respondents reported that the public had an over inflated expectation of military capability to meet the requirements of a bioterrorist incident. They felt that the general public would not only want military support in a catastrophic event, but they would demand it. Concern was voiced for the use of reserve components and the impact that might have on the capability of local communities when they vacate their civilian positions. Political issues were reported as inhibiting the process of integrating the response.

Figure 2 Interagency role in political decision making



Financial and resource issues were reported as being paramount to all respondents. The link of resources with mission was identified as a reason for lack of universal military engagement in planning. The lengthy military planning process to budget money for programs was identified as the reason this "new" requirement was not adequately funded. Public health resourcing was reported as inadequate to meet the demands of additional coordination efforts. Concern was expressed for the availability of funding for projected requirements for integrated planning and exercising. It was indicated that there are limited response personnel in the entire system and that public expectations are far greater than reality. The existence of multiple parallel programs that are not integrated was thought to be due to pockets of money that fund independent projects.

The complex laws that govern the use of the military for domestic support operations were identified as major factors in how and when to use the military. Every respondent raised **legal concerns** as major issues. Public perception of military takeover and infringements on civil liberties was identified frequently. It was thought that the public is uninformed about military restrictions under the law that prohibits police actions by federal military. The media is thought to perpetuate public fear. The need for a recognized process to validate the request for support as a legal use of the military was cited as an absolute requirement. There was concern, however, that the current process was slow and activation of the system could be too slow in the event of a time-critical response.

The legal access to the reserve components was an area of significant concern. The reserve components were thought to be critical in the response. Concern was voiced over the change in legal status that occurs when a soldier is acting in a state guard role and then is activated during a mission. Access to the federal reserve needs to be streamlined.

The dynamic environment produced by a potential domestic bioterrorist attack creates complex and overarching barriers to successful integration of critical military support. The significant issues to emerge are the clash of cultures between the military and civilian communities in their approach to response and requirements for doctrinal guidelines; they have limited experience working with each other. Although the majority of the American public expects the military to support the needs of the nation, political extremists on both ends of the spectrum were vocal against use of the military for domestic response. The political fallout was perceived as paralyzing the planning

process. Financial requirements revolved around allocating the resources to programs that would improve integration and the coordination of existing programs into a concentrated effort. Legal guidelines to employ military assets in domestic environments were seen as necessary but overwhelmingly complex. All of the processes led to common misunderstandings and unmet expectations.

V. DISCUSSION

Discussion

The barriers to the use of military medical assets in domestic bioterrorism are admittedly complex. The focus of this research is on senior-level policy and the integration of DoD medical resources for domestic response to bioterrorism. While the Department of Health and Human Services is clearly in charge of coordinating federal domestic medical support, the overwhelming support requirements predicted for incidences of bioterrorism require optimized federal partner participation. During a significant bioterrorist incident, integration of DoD medical capability is critical given the predicted chaotic environment analogous to war.

The research indicates that it is well documented that the military serves in a support role to the Lead Federal Agency in domestic issues. However, ambivalence exists regarding the specifics of how much, how fast, and to what extent the military should participate. Response planning and implementation is riddled with concerns that current policy does not facilitate rapid access and integration of military assets that are perceived to provide unique capabilities. The indeterminate environment of a bioterrorist incident intensifies the lack of clarity.

The interviews indicated that military medical support is available as prescribed by the current system. The emerging question became, given the changing threat, how

should federal medical support be organized in order to optimize military response within the necessary legal constraints? Consensus was that the current system would not optimally react to a significant bioterrorist event, and that the evolving policy planning process is not complete, allowing for gaps in the response.

The research identifies multiple perspectives on what and where capability should be developed. Should DHHS focus on enhancing the local capability, providing for federal support for the most likely scenario, or provide comprehensive assistance given the worst-case scenario? A cost-benefit analysis for these different roles and the sustainability of the options has not been done.

Civilian and military health response systems differ in their approach to doctrinal organization of responsibilities. The military in general publishes doctrine to which all members and organizational units adhere. Interestingly, the research identified very little published military doctrine on how the military medical structure is to support the civilian requirement. On the other hand, the civilian system's plan for response is inherently less structured than military planning. The interviews underscored the lack of written doctrine specifying detailed integration of DoD capability for domestic response.

Further, this research found difficulty for both systems to make planning work. Military decision-making requires knowledge of a number of critical factors that are not currently available when planning for military support to domestic bioterrorism. During medical response planning for battle, numbers and types of battlefield casualties are projected given the different levels of battle. In that way, medical requirements are identified. No such model exists for domestic bioterrorism.

The Federal Response Plan calls for military support after the local, state, and civilian federal resources are exhausted. Awareness of existing capabilities and requirements is a critical planning factor. The research identifies numerous existing teams in the civilian and military environment. They all had requirements to provide some degree of response and advice during bioterrorist scenarios, but no comprehensive data exist on the combined capability and specifically how they work together. With vague data on existing resources, integration becomes a local response problem with strategic implications.

This research suggested that as numerous unmet requirements in the response process were identified, efforts to integrate the military medical community drove initiatives to "fix" the problem at the operational response level. Pockets of funding, in the absence of a strategic plan, generated a multitude of independent initiatives to meet the demands of the changing threat. All of these initiatives together lead to increasing disconnects in the overall process.

The interviews revealed that the interagency process provides the forum to negotiate and coordinate the detailed responsibilities of all federal agencies. While the Federal Response Plan was hailed as an outstanding example of a cooperative effort of relevant federal agencies, respondents indicated that more emphasis is required to increase coordination and implementation in integrating the process. Increasing the focus at the senior level through the interagency process can define jurisdictional responsibilities, increase awareness of requirements and capabilities, and produce a synergy of effort.

During the interview process it became apparent that both the civilian and military respondents have limited knowledge about the capability that each other's organizations possess. In many cases perception of capability exceeded reality. Many of the gaps in the planning process could be traced back to ill-defined capability. Rapid integration of capability was a persistent issue.

The National Disaster Medical System brings together the partnership of HHS, Veterans Affairs, FEMA, and DoD to meet the health-related demands of overwhelming disaster. The research indicates that as strategic planning for integrated response evolves, the NDMS is a vital link between conceptual expectations of response and the operational integration of existing pockets of capability. The primary military support for NDMS is organized through Federal Coordinating Centers. These centers have different management structures depending on the organization running them—Air Force, Army, Navy or the Department of Veteran's Affairs. Their primary responsibility is for hospitalization in fixed facilities. Theater of war medical management is organized through a very different structure focused on deployable medical capability through field medical commands and other field units.

The NDMS is undergoing change from a requirements-driven process to a systems approach to medical support. The interviews reinforced that the planning process for large-scale response will continue to use the NDMS as a template. It became evident that senior officials believe that the changing threat requires a strategic review of how the process has been executed to date, what the new environment dictates, and what that process should look like.

This research on the deployable assets designed within the NDMS found a unique all-volunteer force with rapid response capability. The Disaster Medical Assistance Teams (DMATs) continue to develop their triage and treatment capability. They can be self-sustaining for 72 hours, however no published data reflects the number of casualties they can care for given different levels of acuity. Given a scenario of 100,000 biological casualties in pockets of concentration, questions exist as to the follow-on support requirements when DMATs expend their capability. How will the military response unfold, and how will it fit with the local response? Current policy focuses DoD support on evacuation and hospitalization. During ambiguous situations where there are no guarantees that the population being evacuated is free from contagion or contamination, evacuation may not be an option.

Exercises focused on WMD response have difficulty overcoming the overwhelming magnitude of requirements. Their intent is to improve the body of knowledge, integrate concepts, and exercise the components of response. However, the research suggests that the exercises all too often identify the same issues identified during previous exercises. Additionally, they focus on very few of the requirements for federal medical support as it applies to bioterrorism. Post exercise management fails to initiate a process for implementation of identified requirements for change. Exercising the integration of concepts that have not been tested comes with the risk of a perception of failure. The focus must shift to exercising and training in the ambiguous areas of bioterrorism. There will be areas where organizations will be seen as unprepared. That should not be interpreted as failure. There must be recognition that if all goes well, the status quo is perpetuated.

The interviews defined the intent of forming DoD's standing Joint Task Force for Civil Support. The military is changing its organizational response under the developing standing joint task force to proactively plan for domestic military support for WMD. This forum will have the potential to address many of the coordination challenges evident in the military medical response. The current model responds to the requirements as the disaster unfolds. The standing joint task force will move to proactive versus reactive response. The planned response will engage personnel and organizational elements aligned through the military deliberate planning process. As such, military training and exercise will be a part of the organizational plan. Coordination of the medical planning in response to an incident will fall to the joint task force.

Throughout the research the civilian leadership of the Department of Defense identified the reserve components as the lead organization in the civil support mission. While the National Guard, acting within its state role, has legal authorization to respond, access to the federal reserve is limited under Title 10 U.S.C. The conflict between where the resources reside and how the government gains legal access to them is convoluted and problematic. Tremendous support assets required for domestic response, including the preponderance of the military medical professional personnel, are resident in the federal reserve, particularly in the Army Reserve. Legal initiatives specifically Title 10 USC, section 12304b provides for access to the federal reserve components. It authorizes federal reserve forces to respond to a confirmed or suspected WMD event. These legislative initiatives to improve domestic response to the uses of weapons of mass destruction were reported as problematic for bioterrorism response. The legal basis for response relies on awareness of or suspicion of a terrorist event. Because the potential for

the consequences of bioterrorism to overwhelm systems and claim significant lives before terrorism is confirmed or even suspected, planning for response under this legislative initiative is stifled.

Additionally, the interview process revealed that DoD medical coordination initiatives are challenged by the military's decentralized medical system. Because the medical mission of the military is to support military members engaged in war-fighting activities, medical personnel are aligned in many different types of units assigned to different commands. The military healthcare system managing the NDMS program provides for care to soldiers, their families, and retirees during peacetime. Although they serve in a supporting role to the medical elements directly aligned with the military war-fighting mission, their operational control is through a different chain of command. Personnel operationally aligned with theater of war medical support are functionally aligned under combatant commands. The different structures lead to gaps in domestic response planning. Additionally, the military medical personnel serving in the reserve components have a different command and control structure. The reserve components as a whole have limited interaction with the current NDMS response.

Differing cultural perspectives also exist for different organizations within the military. They change from service to service, from active component to reserve components, and from federal reserve to National Guard. Cultural barriers often hinder program development. The interviews also identified a military perspective that is often at odds with the civilian perspective. An opportunity presents itself in the use of the reserve components for domestic response. The primary employment of reserve military members who reside within the civilian workforce suggests that members of the reserve

components would have fewer barriers to cultural integration with their purely civilian peers.

The research also identified many differences in civilian versus military organizational leadership and management. Both organizations found that increased operational tempo and organizational downsizing reduce the capability of all organizations to participate in planning. Ongoing organizational change in DoD structure limits the habitual relationships that keep many civilian organizations connected. The revolving door, as it was referred to, of military personnel assigned to critical coordinating positions led to a reduced level of comfort for civilians in coordinating the response.

The new and changing environment of the asymmetric threat became a national security concern less than ten years ago. The research identified that the political arena pushes much of the activity to change before elements are developed to support the change. Financial support, because it was not in the planning cycle, was not tied to a strategy. Many initiatives reported failure due to lack of funding. Others were provided with more funds than requirements for the programs they supported. Many new programs have no sustainability plan.

Throughout the interagency coordination process, the research identifies difficulty for the bureaucratic organizations in dealing with the lack of control over another organization's plan. The multi-jurisdictional programs can benefit from the interagency approach to coordinating the strategic planning process if emphasis focuses on organizational effectiveness though consensus-building. However, the political and

financial interests at the senior policy level are often at odds with optimal program performance.

Interview Summaries

Respondent # 1: Assistant to the Secretary of Defense for Civil Support

- Role is support
- Only when civilian capability is overwhelmed.
- Appropriate because of unique mil medical capability.
- Field hospitals
- Logistics
- Transportation
- Bio may take days to weeks to determine terrorism vs. natural.
- Rapid response is required.
- Must be requested.
- Validate need—all other sources are unavailable, nature of the event
- Legal authority
- Who pays?
- Naturally occurring event—DoD would support, but different laws apply, must follow legal guidelines.
- Threat is driving new initiatives to become proactive in planning for response.
- Previously reaction oriented—identified requirement for each new request.
- Must exercise new relationships.
- Must understand limits of authority within continental US.
- Rapid change post Desert Shield/Storm.
- Outside U.S.—active force; within U.S.—reserve
- Need to address perceptions; understanding and knowledge base is lacking.
- Public perception
- Left, civil libertarians concerned about military takeover
- Right, concerned about military takeover too, they think DoD has ulterior motives.
- General population expects military support given a catastrophic event.
- Macro problem
- This is extraordinary concern so why are we not prepared?
- Resource constraints
- Science constraints—don't have the technology
- Need a different way of thinking about it.
- Newly identified mission→Reorganization→changes in responsibility→turf issues
- Focusing on consequence management is a sea change in the DoD approach, if we need to respond to a terrorist attack, the underlying perception is that we somehow failed to prevent something bad from happening. Our focus has always been to stop something from happening. We are starting to accept that we need to prepare for the unthinkable.

- Support to HHS is a focus for civil support from DoD.
- Supporting the fighting strength (military medical mission) broadly defined means supporting the civilian population when they are targeted…refers to the will of the nation.
- Need to exercise the political decision-making to identify priority in the event of a civil response while managing a major theater war given our limited resources.
- This is an interagency issue.
- Differences exist in the command and control relationships when working in civil support, relationships with FBI and FEMA are critical. We need to exercise with interagency partners.
- Guard and reserve assets will be critical in the response; reservists are often in critical civilian positions that would be counted on during a BW event.
- Need to de-conflict the military and civilian priority for critical medical vaccines and equipment.

Respondent # 2: Senior Advisor, Office of Secretary of Defense for Health Affairs

- Role—yes
- DoD has expertise in medical response to biological warfare (land warfare concept)
- A timed response is dependent on who, what, when, where, why.
- U.S. biological warfare response issue has not been thought through.
- NDMS is related primarily to bed capacity.
- Providing hospital ships require shutting down fixed facility Navy hospitals. DoD would provide hospitals if directed, but don't think that is our primary mission.
- We don't have the capacity for a lot of the medical equipment that may be needed…ventilators, etc.
- In a bio event there may be competition for scarce resources—ventilators, anti-virals, these are interagency issues—they need to be de-conflicted.
- Coordination is a challenge. A response today is chaotic. Too many people in charge of overlapping responsibilities.
- The public expectation is that DoD is there quickly. They have difficulty in differentiating between the roles of the different components. The Guard under the governor is involved in a lot of things where the federal force has no role. So the public thinks the federal force is there.
- We have a capability that is critical. DoD is the only agency that moves people and equipment great distances, quickly during emergencies.
- Differing perceptions exist as to the role DoD should play given our unique capability.
- Civil support has not been organizationally assigned as a mission, we are not resourced to do it
- Supporting the civilian environment takes away from our wartime requirement.
- A conflict exists in resourcing. Managing the requirements for civil support takes time and support personnel. The training value must be assessed. If it is not compensated, something will fall through the cracks.

- Communication is a challenge in civil support. It does not fall into NDMS, but it is a role for HHS. DoD tends to lean forward and do things that need to be done because they know how. It was probably never brought up before, or stressed or tested.
- Need an interagency approach to coordinate military and civilian activities related to civil support.
- Concerns for martial law, the issue is that of mission creep. If we go in with a medical mission, will it escalate to a police mission?
- Need to exercise to be able to respond appropriately.
- Need to have DoD internal capability to respond and support ourselves before we are too concerned with the civilian support.
- Need better interagency coordination.
- It is not business as usual. This is a totally different environment

Respondent # 3: Director of Military Support

- Crisis response is what the military does.
- The U.S. military is a national asset.
- DoD has a capability to set up medical units quickly—they are part of our warfighting mission.
- DoD is expected to participate if large numbers of civilians are dying.
- The reality is that DoD will do it.
- The interagency must work out the details of integration.
- Structured military translates to rigid, formal, doctrinal; civilian is different—appears informal on the surface, but their processes really are fixed.
- Working in civil support will force military to adapt to processes developed by other agencies.
- Fear of infringements of civil liberties and a police state inhibits a formal process.
- Military strength is command and control.
- Civil Support is a distracter to military commanders.
- Opportunity for technology transfer from civilian to military.
- Military does not train for the civil support mission—will rise to the call when assigned.
- One stop shop for civil military coordination is needed; hopefully the joint task force for civil support and national domestic preparedness office will do that.
- The growing understanding of the issues is making things easier; still hard work operationally on the ground.
- Synchronization of activities on the political level is a challenge.
- Military leans forward—if the mission is given, they move out. The perception is they are taking charge. Need to get the integrated processes in place so that they make the system work for every one.
- There are question regarding the unique capability of the military medical personnel and rapid integration with the civilian workforce—probably works at the tactical level—Doctors and nurses speak the same language.
- Command and control structure interface and interagency issues are of great concern.
- Need to figure out the balance.

- Expectation by the public will be for us to be there quickly when people are dying—most of our domestic missions take a few days to sort out what is going on. DoD will not have four days to figure this out when it happens.
- How much training—is it transferable to the warfighting mission?
- Counting on the joint task force for civil support to translate all the issues and mission requirements so that the tactical interface is smooth.
- Reluctance to make this look like a military lead operation—military leadership model is to take the mission and run. It is our success, but here it translates to overbearing.
- Second and third order effects of the political process get in the way.
- Need to find a way to integrate without being in charge.
- Need to exercise to improve integration.
- Civil support is not homeland defense—people need to understand that.

Respondent # 4: Special Assistant for Civil Support to the Secretary of the Army

- Need increased organization to the medical response.
- When lack of command and control exists, DoD leans forward and demonstrates its organizational effectiveness.
- DoD is well organized to respond…that is what we do.
- Concern for public perception of military takeover limits effectiveness…need to educate and stress that the President and the civilian leadership is in charge…we only do what we are told to do, we just do it well, our strength is translated to the threat of military takeover.
- How fast we respond is constrained by the concerns for military takeover. The lawyers are concerned about the immediate response clause. This is high visibility.
- The response process is over bureaucraticized.
- We need a "prepare to execute" order and exception to policy process for the medical response.
- There is a lot of misperception about roles and capability.
- Need to change the warfighter mentality…civil support is a warfight.

Respondent # 5: Acting Deputy Assistant Secretary for Reserve Affairs

- Role: Yes
- DoD is a resource to be used in a national emergency.
- The medical support role is to HHS.
- Must be balanced with the mission to defend the nation in times of war.
- Can't get to the RC fast enough.
- Legal issues constrain the use of the federal reserve.
- Concerns of a police state and military law enforcement migrate to the support arena. They cause the political system to become paralyzed.
- The public has elevated expectations.
- Focus has been on chemical weapons, not biological or nuclear. The problem is that the response is completely different.
- Senior leadership in the military recognizes the need for civil support response planning.

- Civil support mission is not clear.
- Commanders are not aware of the requirement…they are focused on their primary mission (being prepared for war). That is what they are paid to do. That is what they are evaluated on.
- We respond today ad hoc. The joint task force should help.
- Need to exercise the integration of all levels of activity.
- Joint training models don't take into consideration the diverse background and capability found in the civilian sector. Legal constraints are different at home.
- Civilian community hierarchy is not integrated over large boundaries. Every locality is different.
- Problematic going from state NG to fed NG. The rules change overnight.
- Contemplating, understanding, and appreciating the dimensions of a catastrophic event are primary issues for planning the response.
- The military does not have the resources that most people think we have.
- Integration of assets on the ground is a challenge.
- Second and third order effects of pulling large numbers of medical out of their civilian role could be a problem.
- Balance of warfight mission with civil support mission is an issue.
- Bureaucracies are slow to change, quick fixes don't work.
- The way we have always supported the request is to pull pieces out of the entire force. We can't do that any more. We have to coordinate and integrate the planning.

Respondent # 6: Special Assistant for Civil Support to the Secretary of Defense for Manpower and Reserve Affairs

- Role—yes, but it must be in a support role.
- It is all about change.
- Bureaucracies do not change very fast.
- We need to continue to define the role of the military.
- The reserves are slower than the active force to respond.
- We need to identify the requirement then develop a path to get to the objective.
- The reserve components must be organized to respond.
- There is public fear of military takeover, but if and event occurs, they want us there.
- Many parts of DoD are not accepting the mission; others are leading the way.
- We may need to redefine war.
- We need to look at the current threat.

Respondent # 7: Department of Health and Human Services, Director, Office of Emergency Management

- DoD is a partner and needs to allocate aeromedical assets—they must be there when we need them.
- As a partner DoD should provide the needed personnel, equipment, and supplies. The major responsibility is air transportation and patient management when they are distributed to hospitals.
- DoD must also manage the beds.
- NDMS is the military's mission.

- There is no 1:1 parallel between DoD experience and civilian experience, leading to organizational differences. These things need to be integrated.
- Resources in equipment and supplies translate well.
- NDMS agreements of transportation support override the other transportation agreements of the FRP.
- Medical requirements are unique and require different support.
- Exercises need to work on the issue of DoD support.
- Relationships to integrate the process are built on trust.
- HHS never had an operating manual; need to have doctrine put down on paper.
- Fiscal constraints
- Concerns for who pays for patient care.
- NDMS focuses on patient movement and hospitalization; third option being considered is auxiliary hospital facilities.
- HHS has a logistics and supplies approach to how to provide support after 72 hour of sustained DMAT function.
- Resources are not limitless, 26 teams of 35 people...not enough to meet catastrophic event needs.
- There are not a lot of DoD resources...a hospital ship would require closing fixed hospitals in order to staff it.
- PHS has 6,000 officers on duty and 3,000 reservists...all health professionals; current access is 1000 commissioned officers and 7,000 civilians.
- PHS not organized like DoD...looking at ways to restructure to gain access to more in an emergency.
- Readiness is improving but has a long way to go.
- Folks were not as ready as I expected. Recent relief efforts identified that DoD equipment was not working; the personnel were not prepared for the refugee support mission.
- Military personnel need preparation to learn to work with civilians in the civilian environment. The cultures are different. They need to exercise.
- There is a lot of misunderstanding.
- Perception that military commanders feel that they are in charge, they need the command and control structure, but it has not been thought out how to make it work.
- It takes a lot of training and exercising together.
- Need to exercise the transportation piece, need criteria for transport—personnel, care, patient condition, how it works at the reception site. We can do the side-by-side care with very little problem.
- No awareness of RC/AC. It is a problem if the majority of the medical force is not available when PHS needs them.

Respondent # 8: Federal Emergency Management Agency, Military Liaison

- Bio is the greatest threat, received the least attention, and is the most insidious because you don't know you have been exposed.
- Role: Yes but currently it is a secondary mission.
- Many expectations of DoD support—they exceed DoD's capability.
- Unique to the U.S. is the respect for military...the public expects us to be there

- DoD can move fast.
- Unique capability is required in a disaster.
- Posse Comitatus is misunderstood.
- No clarity on how the military personnel would integrate into a large scale civilian medical emergency.
- A lot of misperceptions from both the military and the civilian community on roles and responsibilities.
- Need clear guidance to DoD, emergency response community, civilian medical centers, etc.
- Limited resources.
- DoD always supports, not in a lead role.
- Need awareness of state NG engagement policies to integrate DoD capability.
- Training
- Difference in perception of the issues at the tactical, operational, and strategic levels.
- Requires education of the "plan."
- Resources, priority, and prestige drive some decision making.
- Commanders don't know their authority.
- Nothing in the pre-command course that addresses civil support—leads to improper use, or lack of deployment when the resources could/should be used.
- Civilians don't know the process to reach the military.
- Lack of clear lines of communication to medical experts in DoD—no defined medical expert in military support to civilian authorities.
- Lack of single point of contact in DoD.
- Informal relationships to get information—personality dependent.
- No detectors, need the technology. It is not there yet.
- Military should be the support of last resort.
- Most people have trouble dealing with the overwhelming magnitude of biological warfare.

Respondent # 9: Department of Health and Human Services, Asstant to Director, Office of Emergency Management

- Role: yes
- Primarily in the terms of teams of personnel and specialized areas.
- Areas that look like a fit for support are: lab, threat analysis, support personnel in logistics training for medical equipment and supplies, access to additional pharmaceuticals and vaccines and personnel for the near term support and for the weeks and months that may be needed. Also in supporting alternate care facilities and mobile medical facilities. There is a role for support in the terms of distribution of pharmaceuticals and supplies, public information, civil affairs, as well as possibly distribution of masks.
- Don't understand make-up and what resources are resident in DoD.
- Preventive med, vet, epidemiologists, and infectious disease specialties are needed.
- How do we engage specialties?
- We are told to ask for capability blindly, without any awareness of the existing capability.

- Multiple links at DoD.
- The formal route is the Executive Secretary of DoD. That way we are reimbursed for everything we get, subject to the economy act.
- A declared event goes through FEMA to ESF 8, then through Health Affairs.
- We work directly with Health affairs, who works the requirements through the Director of Military Support.
- Currently in threat assessment, have not had to work the issues. The Centers for Disease Control and Prevention does not have the capability yet for anthrax, but we have worked with the Naval Medical Research Laboratory. They provide great support, but you can't rush biology.
- Question from the strategic level is how does the integration work between the Rapid Assessment and Initial Detection teams, the joint task force for civil support, and the disaster emergency support team?
- Too many response elements that have state and federal role…overlapping responsibility and jurisdictions.
- How does the joint task force play with their assessment, who do they plug into? The joint information center, or their own element?
- There seems to be a lot of capability but no coordinated control.
- Rapid Assessment and Initial Detection teams feed into the governors…they will be getting multiple messages, there is a lot of concern for the coherence of information.
- The public will expect everything from DoD. They will win all the time! Communities will want everything they don't have to be provided by DoD…like in the last exercise.
- Perception of DoD: They plan independently of HHS. There is no consistent policy so everywhere you go, they do things differently.
- There is no funding for DoD to prepare to assist civil support. The Commander-in-Chief's surgeons are not missioned, so they don't have money to do it.
- How will TRICARE (military medical system) pay? There will be a big disconnect…I don' think they understand the delta that exists, much less how to handle it.
- What is the plan to pull in the RC? How fast will they get there? What specialties will you bring? Are they 100 individual consultants or are they an organized force? Are they chemical/biological warfare response trained? Do they know what they are doing?
- How will the RC determine whether the personnel they are activating are not the critical civilian responders in their local community? NDMS policy is not to activate personnel within a 500 mi radius of the area of impact.
- DoD should only be used as a last resort.
- The most challenging area is to coordinate civilian medical resources as they exist today with an organized federal response. A lot can be learned from the flu pandemic in 1918 where people were dying faster than the medical community could reach them. There was a tremendous military response. It started in Ft. Riley.
- We need to look to DoD for other support. They do medical logistics well. We need to tap their capability to do vaccine production.
- There needs to be a cohesive approach.

Conclusions

Complex barriers exist regarding the use of military medical assets to respond to domestic bioterrorism, however they are surmountable. Bioterrorism requires a significantly different approach to response. Identifying the expectations of all federal departments involved in the response is a primary factor.

The current focus of military support for evacuation and hospitalization to remove victims from the impact site must shift to one of a surge capacity to support the Department of Health and Human Services in community response. Deployable medical assets in large numbers may be required. Bioterrorism response planning must shift to identifying the magnitude of the response while focusing on disease rather than the traditional emergency response.

Misperceptions about requirements and capabilities are primary factors. The requirements are misunderstood within organizations as well as across organizational boundaries. The indoctrination of the nuclear and chemical incident response in the medical response community developed a medical support plan that is inappropriate for bioterrorism. The obvious attack along with the initial decontamination and acute onset of symptoms in a chemical or nuclear scenario are absent in a biological event. Requirements more closely parallel a rapidly evolving epidemic. Capability to respond exists in areas outside the traditional emergency response community.

Senior policy officials present their vision of an integrated response in multiple forums. The research indicates, however, that the implementation plan for the vision has not been coordinated or approved throughout all organizational structures required for implementing change. The change is constrained by old doctrine and habitual

relationships that have not been reprogrammed to accept the new challenges. Efforts to remove legal and doctrinal constraints have not gone far enough to enable organizations to plan for response.

Tremendous support for domestic bioterrorism is resident in the military medical departments. However, the military will not respond unless requested to do so by proper authority. Concerns for the perception that the military will engage in domestic operations inappropriately has stifled planning. The military medical response is not currently organized to optimally support the overwhelming requirements of a civilian bioterrorism incident.

My research identified that operational response planning factors used by DHHS parallel many of those used by DoD. Joint military theater of operations health service support planning requires significant coordination with the host nation. A similar effort for coordinating the military theater of operations medical support, using the domestic environment as the host nation is required.

Recommendations

An integrated strategic plan addressing the needs for a bioterrorism scenario and the existing capabilities will provide a menu of choices to identify courses of action in response planning. Through the interagency process a program to more clearly identify roles and responsibilities within the NDMS federal partners will serve to improve the planning process and provide a forum for partnership buy-in

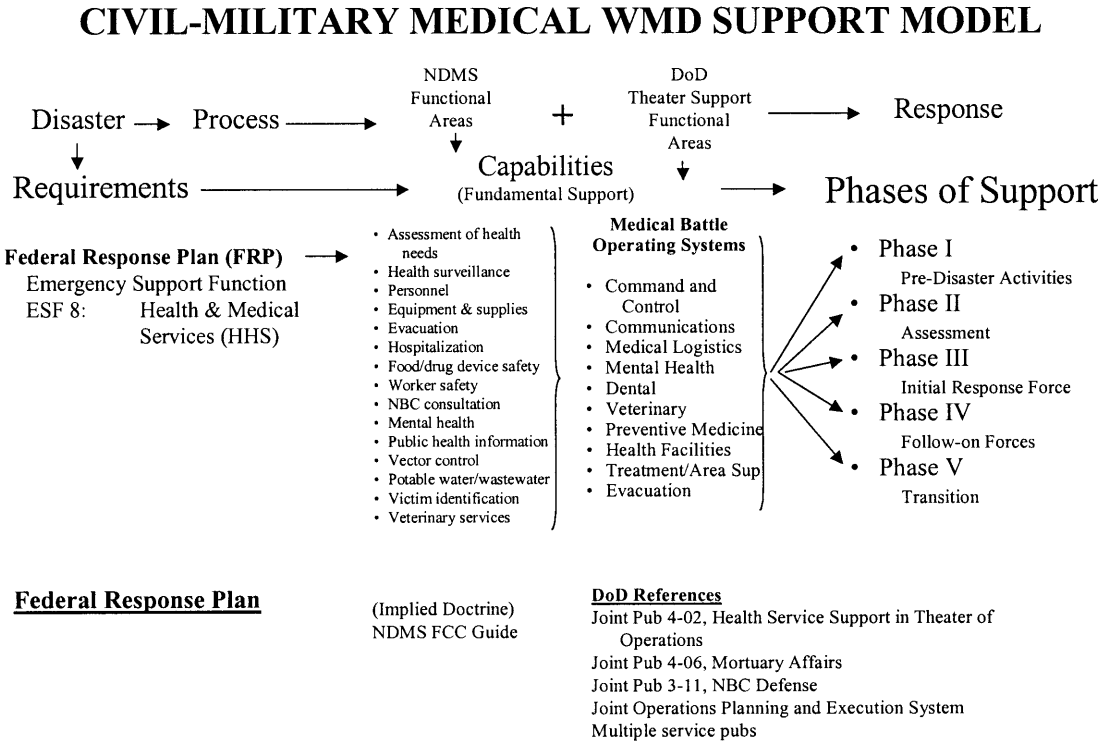
A risk-benefit and cost-benefit analysis on the use of federal medical assets for bioterrorism response should be undertaken. This should be a combined effort led by DHHS with the assistance of the NDMS partners. When DHHS identifies its capability

and requirements for support, the requirements for military participation should be integrated into the medical planning through the Joint Task Force for Civil Support. Forces should then be assigned through proper DoD channels.

Identification of a single point of contact for integrating military medical response would provide continuity in the operational response planning process. The assigned organizational element will act as a liaison for domestic coordination as well as a planning and execution coordinator for DoD internal events. Army theater medical planning supports joint military doctrine and could serve to facilitate the integration of the health services support functional areas. Lessons learned from joint operations during domestic support operations can facilitate deliberate military medical planning for civil support. A suggested format for engaging in the planning process is presented in a civil-military medical support model (Figure 8).

The model centers on the event or disaster to drive the process of integrating the direction of DHHS with the capabilities of DoD to coordinate the response. Requirements derived from the specific event are levied through the corresponding fundamental support capabilities of the organizations. The categories of functional support within HHS are coordinated with the combat health support functional areas of DoD (known as battle operating systems). Through this process, five phases of support from pre-event planning activities that engage DoD assets to the transition back to complete civilian control can be accomplished.

Figure 8 Planning for military support to domestic bioterrorism



The unique, highly skilled, and difficult to maintain requirements for catastrophic response are resident in DoD. As HHS further develops a bioterrorism response plan, legal guidelines for domestic use of the military dictate a primary reliance on civilian assets. However, plans to optimize integration of military medical support must be drafted and exercised. Specific guidelines for utilization must be tied to realistic bioterrorism scenarios. A model defined in the Joint Operation Planning and Execution System identifies a deliberate planning process that can balance mission requirements with capability. A similar model should be used to align military medical assets for the surge capacity required for bioterrorism response.

Joint exercises and training should be undertaken through the network of military and civilian medical training sites. The Army's Regional Training Sites-Medical and National Disaster Preparedness Office medical training facility offer optimal facilities for integrating training. A combined training program for policy implementation and response will develop a solid basis for facilitating integrated operations.

A civilian medical training program should be undertaken in order to provide a format of how to identify the resources available within the state and federal governments. The program must be comprehensive and link all of the available programs in order to provide local medical personnel with the tools to easily engage in the process to facilitate optimal integration of the complex system.

Areas for further study

This study focused on the senior policy level issues of DoD domestic response. The ambiguity of the threat, as well as the highly political nature of the response or planned response, provides a wealth of opportunity for further study. The issue of domestic bioterrorism is interwoven into the national security environment. A significant study at the top of the list is a political analysis of the issues surrounding military medical domestic response and the effect on military readiness. A study of that nature could also relate any impact to domestic response that may occur if the civilian community relies on critical military assets that may be deployed and unavailable. A thorough examination of the second-, third-, fourth-, and fifth-order effects of the scenarios presented must be undertaken. The detailed review should proceed through both civilian and military chains. Long-held assumptions should be critically challenged. The details of the review should address issues uncovered from the initial event through the management of all

casualties, the mortuary affairs plan, and the long-term impact on the infrastructure of the United States.

A risk-benefit analysis of different options to respond is required. These could take a social, political, or financial perspective. Media management needs to be part of the review. The media's ability to calm or incite throughout a large-scale event is critical.

A need exists in quantifying both the requirement and the capability available to respond. Although a worst-case scenario would require more resources than are currently available, the military and the civilian communities have numerous capabilities that are not linked to the response. Networking these capabilities will provide for improved response capability. Additional studies must identify optimal training events to improve response.

REFERENCES

Anonymous. (August 1998). *Lessons Learned from Hurricane Andrew.* Paper presented at the Field Medical Conference, Atlanta, GA.

Assessment, O.o.T. (1993). *Proliferation of Weapons of Mass Destruction: Assessing the Risks*. Washington: U.S. Congress.

Betts, R. K. (1998). The New Threat of Mass Destruction. *Foreign Affairs* (January/February 1998), 26.

Blanchard, B.W.P.D. (1986). *The American Civil Defense 1945 - 1984: Evolution of Programs and Policies* (Monograph Series 1985 FEMA 107).

Campbell, J.K. (1997). *Weapons of Mass Destruction Terrorism*. Seminol, FL: Interpact Press.

Carus, W.S. (1997). *The Threat of Bioterrorism* (Strategic Forum 127). Washington, DC: National Defense University, Institute for National Strategic Studies.

Carus, W.S. (1998). *Bioterrorism and Biocrimes: The Illicit Use of Biological Agents in the 20th Century* (Working Paper). Washington, DC: Center for Counterproliferation Research, National Defense University.

CDC. (1998). *Preventing Emerging Infectious Diseases: A Strategy for the 21st Century* (Strategic plan). Atlanta: Centers for Disease Control and Prevention.

Clinton, W.J. (1998a). *PDD 62: Protection Against Unconventional Threats to the Homeland* (White Paper). Washington, DC: The White House.

Clinton, W.J (1999a). *Unified Command Plan*. Washington, DC: The White House.

Clinton, W.J. (1995). *PDD 39: United States Policy on Counterterrorism* (White Paper). Washington, DC: The White House.

Clinton, W.J. (1998b). *PDD 63: Protecting America's Critical Infrastructures* (White Paper). Washington, DC: The White House.

Clinton, W.J. (1999b). *A National Security Strategy for a New Century*. Washington, DC: The White House.

Cole, L.A. (1997). *The Eleventh Plague: The politics of biological and chemical warfare*. New York: W.H. Freeman and Company.

Congress, U.S. (1947). National Security Act of 1947.

Congress, U.S. (1993). The Stafford Act, Disaster Assistance and Emergency Relief Act, *Title 42 U.S. Code, Sections 5121-5204c*. Washington, DC.

Congress, U.S. (1776). Constitution of the United States.

Congress, U.S. (1996). Defense Authorization Act for Fiscal Year 1997, *Public Law 104-201, Title XIV*.

Congress, U.S. (1997). Defense Against Weapons of Mass Destruction Act of 1996, National Defense Authorization Act for Fiscal Year 1997, *Public Law 104-201 Title XIV*.

Crosby, A.W. (1989). *America's Forgotten Pandemic: The Influenza of 1918*. Westport, CT: Cambridge University Press.

Danzig, R. (1996). *Biological Warfare: A Nation at Risk--A Time to Act* (Strategic Forum 58). Washington, DC: National Defense University, Institute for National Strategic Studies.

DHHS. (1996). Department of Health and Human Services Health and Medical Services Support Plan for the Federal Response to Acts of Chemical/Biological (C/B) Terrorism: Department of Health and Human Services.

DoD. (1993). Assignment of National Security Emergency Preparedness (NSEP) Responsibilities to DoD Components, *DoD Directive 3020.36*. Washington, DC: DoD.

DoD. (1996a). Health Services Operations and Readiness, *DoD Directive 6000.12*: DoD.

DoD. (1996b). Interagency Coordination during Joint Operations, *Joint Publication 3-08* (Vol. I,). Washington, DC: Department of Defense.

DoD. (1998). *Preparations for A National Response to Medical Emergencies Arising from the Terrorist Use of Weapons of Mass Destruction (draft)* (Report to Congress).

DoD-Army. (1991) Health Service Support in a Theater of Operations, *FM 8-10*.

DoD-Army. (1994) Planning for Health Service Support, *FM 8-55*.

FBI. (1995). Federal Bureau of Investigation Chemical-Biological Incident Contingency Plan: Federal Bureau of Investigation.

FEMA. (1984). Objectives for Local Emergency Management, *CPG 5-1*: Federal Emergency Management Agency.

FEMA. (1992). The Federal Response Plan.

FEMA. (1998). Terrorism Incident Annex to the Federal Response Plan. Washington, DC: Federal Emergency Management Agency.

Fielding. (1991). Human and Organization Development Knowledge Area Study Guides. Santa Barbara, CA: The Fielding Institute.

Fischer, H. W. (1998). *Behavioral Response to Chemical and Biological Terrorism: Sociological Observations Extrapolated from the Disaster Research Literature* . Millersville, PA: Social Research Group.

Fitton, B. (1999). Decision making within the purview of DOMS.

Franz, D.R.J., P.B.; Friedlander, A.M.; McClain, D.J.; Hoover, D.L.; Byrne, W.R., Pavlin, J.A.; Christopher, G.W., Eitzen, E.M. (1997). Clinical Recognition and Management of Patients Exposed to Biological Warfare Agents. *Journal of the American Medical Association, 278* (No. 5), 399-411.

Friedlander, A.M.W., S.L.; Pitt, M.L.; Ezzell, J.W.; Worshm, P.L.; Rose, K.J. (1993). Postexposure Prophylaxis Against Experimental Inhalation Anthrax. *Journal of Infectious Disease, 167*, 1239-1242.

GAO. (1998a). *Combating Terrorism: Observations of Crosscutting Issues* (GAO Report). Washington, DC: General Accounting Office.

GAO. (1998b). *Combating Terrorism--Observations on the Nunn-Lugar-Domenici Domestic Preparedness Program* (GAO Report). Washington, DC: General Accounting Office.

GAO. (1999). *Combating Terrorism: Observations on Biological Terrrorism and Public Health Initiatives* (GAO Report). Washington, DC: General Accounting Office.

Garamone, J. (1999). DoD Examines Joint Task Force Concept for Civil Support, *http://www.defenselink.mil/news/Aug1999/n08171999_9908175. html.* www.Defenselink.mil/news: Armed Forces Press.

Grange, D., MG, Director of Operations, Readiness, and Mobilization. (1997). Implementation of Sections 1412, 1414, 1415, 1417, and 1421 of the Defense Against WMD Act of 1996. Washington, DC: DA DOMS.

Hamre, J.J. (1999). Remarks Delivered to the American Bar Association. Washington, DC.

Handelman, K.A.a.S. (2000, February 16, 2000). Is Russia Still Preparing for Bio-Warfare? *Wall Street Journal.*

Hart-Rudman. (1999). *New World Coming: American Security in the 21st Century; Hart-Rudman Commission Report* (Phase I): U.S. Commission on National Security/21st Century.

Henderson, D.A. (1998). Bioterrorism as a Public Health Threat. *Emerging Infectious Diseases, 4* (January - March 1998).

Hughes, J.M. (1998). Statement Before the Subcommittee on Labor, Health and Human Services, and Education Committee on Appropriations, U.S. Senate. Washington, DC.

Johnson, S.E. (Ed.). (1997). *The Niche Threat: Deterring the Use of Chemical and Biological Weapons*: National Defense University Press.

Kotter, J.P. (1996). *Leading Change.* Harvard: Harvard Business School Press.

Laqueur, W. (1998). The New Face of Terrorism. *The Washington Quarterly* (Autumn 1998).

Lincoln, Y.S.G., E.G. (1985). *Naturalistic Inquiry.* Beverly Hills, CA: Sage.

Marcella, G. (1999). The Interagency Process and the Military Professional. Carlisle, PA: US Army War College.

Miles, M.B.H., A.M. (1984). *Qualitative data analysis: A sourcebook of new methods.* Beverly Hills, CA: Sage.

NICI. (1998). Military Support to Civil Authority. In NICI--A Civil-Military Institute (Ed.), *Interagency Disaster Relief Resource Guide.* San Luis Obispo, CA: NICI--A Civil-Military Institute.

Rudestam, K.E.N., R.R. (1992). *Surviving Your Dissertation: A Comprehensive Guide to Content and Process.* Newbury Park, CA: Sage.

Sawyer, D. (1998). *Threat From Biological Weapons* (Television newscast *http://www.abcnews.com/onair/ptl/html_files/*). New York: ABC News.

SBCCOM. (1998). *1998 Summary Report on BW Response Improvement Program.* Aberdeen, MD: US Army, Soldier and Biological Defense Command.

Schweizer, P. (1999, October 5, 1999). Facing Threat of Domestic Terrorism. *USA Today.*

Shays, C. (1999). Opening Remarks to House committee on Government Reform: Subcommittee on National Security, Veterans Affairs and International Relations Hearing on Medical Responses to Terrorist Attacks. Washington, DC.

Socher, M. (1999). Meeting on The Interoperability & the Medical Management of a Bio-Terrorist Incident: Defense Week.

Steinweg, K.K.B., William R.; Matt, Jeffrey A.; Riccardelli, Richard F.; Spencer, Carmen J.; Ward, Michael N.; Butts, Kent H. (1994). *Weapons of Mass Destruction: Title 10 Implications for the Military.* Carlisle: Center for Strategic Leadership, US Army War College.

Uhal, H.T. (1995). Soviet Chemical Warfare Agents Novichok and Substance 33: Were They Used During the Persian Gulf War? www.nbcd@nbcdefence.net.

VHA. (1999). National Disaster Medical System, Federal Coordinating Center Guide. Martinsburg, WV: Department of Veterans Affairs.

Zajtchuk, R. (Ed.). (1997). *The Textbook of Military Medicine*. Washington, DC: Office of the Surgeon General, United States Army, TMM Publications.

APPENDICES

Appendix I: Subjects Interviewed

Department of Defense
- Assistant to the Secretary of Defense for Civil Support
- Acting Deputy Assistant Secretary for Reserve Affairs
- Special Assistant for Civil Support to the Secretary of Defense for Manpower and Reserve Affairs*
- Special Assistant for Civil Support to the Secretary of the Army*
- Senior Advisor, Office of Secretary of Defense for Health Affairs
- Director of Military Support

Federal Emergency Management Agency
- Military Liaison

Department of Health and Human Services
- Director, Office of Emergency Management
- Assistant to Director, Office of Emergency Management

* Interview not audio taped

Appendix II: Letter of Introduction

Donna F. Barbisch
640B N. Calvert St.
Baltimore, MD 21202
Donnab@sprintmail.com
410-895-0482

Date Code

M. XXXX
TITLE
Office of XXXX
Washington, DC

Dear M. XXXX:

I appreciate the opportunity to talk with you about my research regarding the use of military medical assets for civil support in the changing threat environment. The overall goal of my research is to ascertain underlying issues that surround the capability to effectively integrate federal assets to respond to an act of terrorism. The purpose of my interview with you is to understand your perspective on the issues you find perplexing. Your input will provide me with unique insights into the policy and process issues at the senior level.

The basis for my research comes from open-ended interviews with key policy-makers and personnel engaged in civil military relations. In order to bound the study, I am focusing it on the military medical (policy not treatment) aspects of a catastrophic domestic bioterrorist event. It is important that I gather views rather than quote doctrine. I will use a series of open-ended questions to gain your perspective on:

1. How you see the role of the military in civil support,
2. Your view of the changing threat and how the military supports the domestic environment and
3. What is working well, what is not, and why?

For the purpose of the research documentation, your comments will be coded and attributed to a representative group and not to you as an individual. In my effort to accurately collect input, I respectfully request permission to tape the interview.

Once again, I look forward to talking with you regarding your perspective on this extremely critical issue.

Very Respectfully,

Donna F. Barbisch

Appendix III: Interview process

Introduction: My name is … Express appreciation for the subject's support of this effort.
Restate a request for permission to audiotape the interview.
Identify the date and time of interview:
Restate the intent of the interview:
State the assumptions: The threat is real, we are talking about a catastrophic biological event taking place in the United States. Briefly describe an unfolding biological warfare scenario: The medical capacity of many cities is overwhelmed. Existing civilian federal, state, and local assets exceed their capability to respond. Requests for military support are in progress.

The basic questions follow. Reinforce that they are designed to create dialogue, as such they will serve as a platform to focus the discussion. They are open-ended to encourage the subject to share their perspective of the situation.

Question # 1: Do you believe that the Department of Defense has a role in the scenario I described?

Question # 2: Define role of DoD; how much, how fast? Does the current configuration work? Mr. Hamre, Deputy Secretary of Defense has said that the reserve components are the forward deployed force for domestic response, how do you think they fit into the overall response?

Question # 3: What do you think the public expects?

Question # 4: How do you think the military as a whole views their role?

Question # 5: What is your perspective on what works well and what doesn't work within the current role of DoD in the Federal Response Plan?

Question # 6: How do you perceive the changing threat from conventional warfare to terrorism in regard to the DoD mission to fight and win the nation's wars; What does it mean to the medical mission to "support the fighting strength?"

Question # 7: Identify your greatest challenge with DoD response.

Question # 8: Given what you have alluded to, what do you think needs to be changed to improve response in this new environment? If those recommendations are adopted, how might that affect other aspects that require military support?

Question # 9: Would you like to comment on any issues we have not discussed?

Thank you. I appreciate your input and the time you shared with me.

Appendix IV: Complete Transcripts

Interview #1: Assistant to the Secretary of Defense for Civil Support

September 1999

Q. What is your perspective on what works well and what doesn't work within the current role of DoD in the FRP?

A. I think that, first and foremost, we need to understand DoD would be in a supporting role to any civilian authority and not be in the lead for any of these kinds of instances whether they are nuclear, chemical, biological or radiological. And that we would be called in to play, principally at the point at which state and local capabilities would be overwhelmed. I would assume also that if we're talking specifically about medical, we would be called to provide support because other federal assets as well might be overwhelmed, public health and other kinds of medical assets. I would think also that because of DoD's unique abilities to mobilize to provide field hospitals, to provide logistics and transportation and other kinds of things that these other kinds of assets that are not routinely considered to be medical assets, but that they could also be brought there in a circumstance of biological terrorism, catastrophic terrorism.

Q. Would you Define the role of DoD; how much , how fast? Does the current configuration work?

A. I think it depends upon the scenario, with the bio scenario where it may be, days or weeks until we're able to do forensics to actually determine precisely what the nature of an event is and to reach a point where local hospitals and other kinds of capabilities are overwhelmed. I think it is difficult to actually pinpoint the speed at which we would respond clearly, once we receive a request, we're able to turn paper around and determine

whether or not we have the money and the legal authority to provide that kind of support. But I think the pacing factor here is not necessarily DoD, but it's the rest of the system that would have the forensic responsibility and the other kinds of medical responsibilities to determine what the nature of the event is. We can then call upon DoD and other assets to provide support.

Q. Given a scenario where casualties are coming into the hospital, a covert event with no warning. The event is unknown until the hospitals were overwhelmed. The issue in a biological scenario is that the hospitals are overwhelmed. That is the trigger point in the biological scenario. The speculation as to a terrorist event may be on going, but even if the it was natural, it is still a catastrophic event with an overwhelming requirement for public health support. Do you see DoD response there?

A. I think much in the same way as we respond to other kinds of natural disasters, floods, fires, hurricanes, certainly when asked, if we had the authority, the legal authority to provide support under any of the emergency support functions by all means. I believe that we would be there to support regardless of whether we know it's a terrorist event or some sort of naturally occurring outbreak.

Q. Do you feel that the current configuration, the way we're positioned is optimal for DoD response? Do you have insights into some things that if you had the magic wand to change the way we do things that we would change anything?

A. I think that there are a number of new initiatives that have been undertaken by senior leadership of the Department by the Secretary and Deputy Secretary and the Chairman within the last couple of months that I believe, given the President's direction from PPD 39 and 32 and the challenge to cabinet agencies to think through this problem and scope out their responsibilities that we have now begun to approach this problem in a different way. I think before we as a Department, we're very reaction oriented, we would

wait until a response came in and then sort of flip through our roledex of capabilities and figure out what we can apply against a particular problem.

But I think that the Secretary and Chairman realize that as the Secretary has called it, we're in a grave new world now, and we need to be a little more forward thinking. We need to actually plan for these kinds of contingencies and exercise accordingly and understand the limits of our authorities for operating in the continental United States. As part of the Unified Command Plan, that was approved by the President in October, we have just drawn up a joint task force for civil support who's responsibility will now be to plan precisely for these kinds of contingencies in a way that I believe the prior system under the Director of the Military Support of the Army could not do. That's not what they were established to do. The fact that we now have an organization whose day to day responsibility will be to think about these kinds of scenarios, think about the kinds of DoD assets that should be applied against them, think about where our gaps and shortfalls of training and equipment and capabilities are, think about exercising them and think about how in terms of command and control all of these DoD assets will be brought together to support and lead federal agency. I think that that is helping us get to the next step. You know, it's just been stood up, it's commanding officer has just been named and until I sort of see how well they do, I think the concept is extraordinarily sound. Hopefully it will provide us with what we need as a department.

Q. How do you think the rest of the military views their role? Do you have any feelings for that?

A. I think that a lot has changed since Desert Shield, Desert Storm, to the military. I think now that troops are required to receive Anthrax, vaccinations, I think that there has been a real sea change in acknowledgment of chemical and biological WMD as a

possible threat whether it be on the battlefield OCONUS, or attacks against the homeland. I think though that the Deputy Secretary has sort of explained this well. He says when we talk about our overseas response, we think about our active forces, our deployed force. When we're talking about the United States, we think more about our guard and reserves as our deployed forces. We need to address the perceptions, the understanding, and the knowledge base in the guard and reserves. I think that those who have been deployed to the Gulf, those who are sort of first to receive Anthrax vaccinations are much more attuned to the threat and the possibility of the problem, than those further down the food chain like me.

Q. Do you have a feeling for what the public expects from the military?

A. I think that there is a disparity of views in the public. We have seen opposition from both the left and the right to the whole concept of the military providing support in this arena. The civil libertarians are quite concerned about scenarios like siege. The right and the militia organizations are likewise concerned about military takeover and that we're sort of masquerading, doing something other than what we say we're doing. I think however, that, the general population would expect that if we had a true catastrophic incident, not hoaxes, we have hundreds of hoaxes across the country. But a true catastrophe event where we would have a need to feed, clothe and shelter hundreds and thousands of people for weeks at a time. The expectation of taxpayers would want us there. The national security starts at home. Many could care less about what's happening in Iraq. It's what's happening at home right now. And so I think that the broad expectation would be that the military is there to protect American interest at home first and abroad second.

Q. Can you identify your greatest frustration with DoD response?

A. I think there are sort of micro and macro problems. The macro problems that I see, when I go out and talk to people and meet with the subject matter experts, I often ask them if the broad perception is that this is an extraordinary concern and yet we're not as prepared as we need to be, so why is that? People generally postulated three sort of reasons why that could be the case. One is the resource constraint, we just don't have enough money to, to get where we need to be. Either to prepare state and locals or for ourselves, to do better train and equip to address the problem and if we had X amount of dollars, we could really get there faster. Then there are others that say, no we're not resource constrained, we're science constrained that we still don't have the kinds of detection systems. We still don't have the kinds of de-contamination and other kinds of scientific and technical solutions to this problem. We've got the best scientist applied towards thinking through this problem, they're just kind of aren't anymore out there and so we can not move the science any faster where we need to go. The third group of people say, it's not resources, it's not science, but we just kind of lack bright ideas. These are operational concepts and we just need to think differently about this problem. I don't know that my views necessarily fall into one of those camps. I think that we need to focus in on all three of those areas to get where we need to go. O the micro level, I think we have kinds of democratic problems still here at the Pentagon. I think any time that you, you begin to focus on a new mission, for example my position was created to deal with the problem. That means that other people who thought they were responsible for this area are no longer i responsible for the area. That comes with its own sort of issues and problems and concerns.

I think though that, to, to our credit, I think focusing on consequence management is a difficult thing for a place like the Department of Defense to actually focus on because what if we have to deal with the consequences of an act of terrorism, it really is an admission of failure. What this building and our work focuses on...we prepare and train to win and to get the bad guys and to disable the device and either to prevent something from happening or through our deterrent capabilities, we prevent something from happening. And so, by saying hey there are possibilities that we're not going to be able to prevent something from occurring in every instance, you're admitting a failure of some sort. It's really an intellectual leap I think and a transition that has taken some time for this building and this institution to work it's way through. To say, hey we really need to focus not just on preemption and prevention, but on the possibility that if something happens, we're going to need to manage the consequences and mitigate and deal with the mess that will ensue. So I think that to our credit, we have worked through that process. It has taken several years, I think it's a real positive indication of how this institution can adapt to the change and threat.

Q. Given the military divisions of combat, combat support, combat service support, can you define what it is given that the failure, if indeed there is one is in the area of threat reduction, not really in combat.

A. maybe it's what is the role of the combat? Part of it is threat reduction, and certainly deterrents. But when you consider our special operations bulletins and their shop that deals with terrorism is called combating terrorism. We have offensive means for preempting these kinds of things from happening. I think it's the strength of our combat forces that perhaps ironically is what lead us into this path. Our adversary needs to strike at us asymmetrically. Because of the overwhelming strength of our combat

capability, they're going to try our soft under belly which is not our combat forces, but perhaps our logistics and mobilization sites our, our follow-on support elements.

Q. So what would the role of the combat arms be in a consequence management situation like we've described here?

A. I can imagine a situation were our combat forces would be trying to identify and destroy an adversary's capability. It's certainly involves targeting and planning. The kinds of things combat elements are really out there to do. That would be the sort of prime mission. I am not sure that is a role for us in CONUS. I think here we're much more focused on the support kinds of elements, decontamination, medical, communication, logistics, transportation and those kinds of assets.

Q. If the medical assets were called upon to provide support, do you see any conflict given their mission is to conserve the fighting strength?

A. I think what we are talking about is the fighting strength of the nation. We're defining our interest differently today. Providing medical resources when you've got a population that's been targeted as opposed to our, our federally deploy elements in the Gulf. I think you're talking about our national will and our national strength.

Q. If we approach this as we do a major theater war and balancing our assets to deal with two MTWs. What might you perceive if we had an event occur while we're trying to manage this at home?

A. That is something that I'm beginning to focus on. I don't think that we have exercised our senior leadership enough, to think through those kinds of issues and concerns. I think that stressing the system in such a way would force decision-making and true political judgments and prioritization. We have had no recent experience managing two contingencies occurring at the same time with the limited assets that we

have. How our national leadership and the national command authority would determine how to allocate assets is a very serious issue. We are dealing with that in the inter agency, I hope that we are beginning to grab hold of that issue.

Q. As consequence management becomes an assigned mission, how do you see dual missioning. What is your perspective on how a commander might prepare for readiness?

A. I'm not sure I agree with the dual mission thing, but I think that commander's first priority is still to fight and win the nations wars. And so properly defined, whether that war is abroad or at home, the question is whether the skill sets are the same. For the most part, the equipment is the same. I'm not sure you can cut it so finely. I think that what would be different, would be the nature of the command relationships. The nature of the constraints on perhaps our ability to act within CONUS. And the nature of relationships if we were involved in some certain kinds of contingency exercising with the FBI and with the other interagency partners. It's certainly not something that we would be doing. I know we're talking about deploying overseas.

Q. You mentioned before, our efforts to assist with the education of the local and state communities. Do you think that is a mission for the military?

A. Education, I know that there has been some discussion at the outset of the Domestic Preparedness program. There have been quite a bit of philosophical discussion as to whether this was a proper mission for DoD to be training first responders. I know that the Secretary, Deputy Secretary, in their opinion, that this is not necessarily the best use of DoD assets. There are others in the federal government who ought to have that responsibility. DoD really ought to be there to provide only those capabilities that no one else can provide. I think however that early on in this program, certainly because DoD

had tremendous experience in dealing with these kinds of contingencies, and thinking about being able to operate and sustain combat in a chemical and biologically contaminated environment, deal with decontamination that we certainly had a level of expertise to bring to the table to help jump start some of these programs. But I think it's wholly appropriate now for us to be disengaging from some of the training aspects of the program and transfer them to other elements in the federal government that are perhaps better positioned. I think though that sort of talking fundamentally, I think that it's absolutely in our interest to, to train and educate first responders to give them the ability and the tools to handle these things on their own so that DoD is not constantly being called to provide support that state and locals are able to address these kinds of things on their own and that DoD would be called only in instances which the capabilities would be overwhelmed.

But I think, I think so far, that we have seen that we have been called less frequently, to assist in the sort of onesies and twosies kinds of threats and that by beefing up the capabilities of our sister agencies and inner agencies as well by expanding the highest capabilities and educating FEMA and public health service as well, that we are able to conserve our resources and our assets and ensure that we will be there when called for, for the major kinds of cases.

Q. One of the things that I was researching in conjunction with this is how we do some of the things we do OCONUS. So, I'm looking at joint doctoring for training. We support the host nation and coalition exercises. Do you see an analogy there? Although there's a different environment when we're CONUS based, many of the similarities exist in our host nation and coalition exercises. Do you see an opportunity to build on joint doctrine and cross walk to CONUS based training?

A. Absolutely. I think that the train runs in two directions. The same concept with our friends and allies who are now in the position to help themselves. We've given them the tools and resources to address these kinds of uncertain circumstances on their own, so that the military U.S. military is not called into every overseas contingency. I think that we are seeing many many more of our friends and allies now popping up on the net, asking for assistance and training exercises. They are asking how do we set up a federal response plan, how do you deal with consequence management. The State Department and the NSC and DoD have been quite actively engaged in, in providing assistance to our friends and allies and helping them develop these kinds of capabilities.

Q. So if you make the analogy and link it back to the U.S. If we look at our host nation as the federal government in the states and then look our, the coalition as state and local responders, should we be looking at training together in response scenarios? As we focus back on the medical issues, we haven't done an awful lot of medical interaction with civilian, and private hospitals. We have the MDMS system, however it hasn't been as strongly exercised as maybe it should be.

A. Absolutely, I think that my knowledge is not extraordinarily deep in this regard, but I do know that for many years, we have allowed in this country of public health surveillance to erode and that, as the White House looked at this problem and thinking about with the limited amount of money where our best investments may be that the determination was that the investments in public health would provide tremendous payoffs within general public health as well as addressing this issue. I am not deeply familiar with precisely where those investments are being made right now in the public health system. But I think that, from what I see in law enforcement and EMS and other kinds of capabilities of really firefighters and police, that they are truly deeply engaged in this. I could only state that, the medical piece of this is absolutely critical and should be

focused on to the greatest extent possible. Again, DoD is not in the lead, so I'm referring to HHS and PHS.

Q. *There are some concerns about dual missioning If the plan is to bring a hospital ship in, the staffing for that already are already in use. Any comments?*

A. You, you know it's very much the same when you think about our guard and reserve assets. Many guardsmen and reservist are precisely the people who are the first responders, so we need to really carefully be thinking about that you know. Sergeant whatever on the police force can't also be called to do his reserve duty, to do decontamination when he's got his responsibility as a local law enforcement officer. I think that thinking about these issues and cross-state compacts and these kinds of issues are going to be absolutely critical when we talk about the kinds of assets that we're going to need.

Q. Do you have anything else you would like to add?

A. I think there's a whole area that we didn't touch on relating in the realm of medical and the scientific and technical expertise. I know within the inner agency, there is a huge effort underway right now between the Department of Agriculture and, and HHS and DoD to sort of pool resources to think through the whole issue of vaccines and antibiotics and anti-virals and therapeutics. I think again here's a place where DoD should not be in lead, but because we have a tremendous amount of expertise and experience because of our war fighting requirements, that we have a quite a bit to bring to the table. When we're talking about the domestic arena and providing protection for the population it's necessarily an area where HHS, FDA, NIH and CDC ought to be engaged in. We are active and equal partners at the table. The Department of Agriculture is a

recent player in this arena and so we are pushing this along. I think that we can also help in reaching out to the pharmaceutical industry, which has been hesitant thus far to partner with us because of the concerns about liability. They have concern about proprietary information and challenge inspection under arms control regimes. We need to convey to them the national security requirement. We have to avoid problems like single source supply and that we ensure that we have surge capability for the kinds of things that we need for infectious and non-infectious prophylactics.

I think another area too is in the area of stockpiling these kinds of medicines and again, here's an area where we have not, I believe that HHS is partnered with VA in this regard, but I think that we have a tremendous amount of expertise to bring to bear because of our logistics and communication and organization kinds of skills and because of the way we stockpile all kinds of other things. And so, we have been working with HHS and VA as they begin to build their plans for stockpiling, prophylactics and other materials for chemical and biological response.

Interview #2: Senior Advisor, Office of Secretary of Defense for Health Affairs

29 September 1999

Q. First of all, do you believe that the Department of Defense has a role in the scenario described?

A. Yes, of course I do.

Q. Can you share with me how much, how fast? How do you see the current configuration enabling the effort?

A. Well, I think that DoD has a role on two accounts. In terms of national security the somewhat arbitrary definition of CONUS and OCONUS in an era when we talk about transnational terrorist threats. Because a rogue nation or individuals can declare war and have it be in CONUS. The old tradition of land war occurring in Europe is changing. I guess what I am saying is that defense has a role to play in domestic defense because the battleground could very well be here in America. The second reason we have a role to play is because we have expertise in the areas. I do thing we have a supporting role. We should not take a lead, but we have a capability that is based on land warfare concept. It would be unnatural for us not to be involved. As far as how soon we should get there...it depends on what the incident is who asked us and how it comes about. And what elements become involved.

Q. Iif you look at the hospitals becoming overwhelmed Lets say the hospitals become overwhelmed before they have any idea of what the problem is. Then within a day their patient load is doubled again...say from 5,000 to 10,000. Do you have any idea what kind of force we might bring to bear?

A. I haven't thought through it... The issue of bioterrorism has not been really thought through. What I was thinking about was the recent encephalitis outbreak in NYC. Some people think that that could be a fairly cryptic, but plausible terrorist event.

There are some reports linking that to Saddam Hussan. That he would introduce that. Now of course it does not have any use as a strategic weapon, but in terms of sowing seeds of civil unrest, concern and upheaval it might have been a ploy that someone might have used. Our involvement in that was very early on, because of our expertise. USAMRID , some of the veterinary epidemiologists were called early on to aid in the cause of death of the crows that died and the vector was. So, we may get...part of DoD would be called out early. Other things would take longer to organize. These Raid teams...I don't know how fast they are supposed to be available but, my recognition is that it is supposed to be pretty short. Now in the terms of providing beds I am sure that would go through NDMS. VA and DHHS. I don't know how much fix bed capability we really have. If it happened in San Antonio or Washington DC where we have large medical centers. We would participate in making beds available. But in terms of mobilizing personnel...I guess that would be how ever fast NDMS would be activated.

Q. Mr. Hamre, Deputy Secretary of Defense has said that the reserve components are the forward deployed force for domestic response, how do you think they fit into the overall response?

A. Bringing in field hospitals and hospital ships are all possible, but it is not like coming in and turning a key. The Mercy or which ever one is here in Baltimore...we would need to shut down other hospitals to staff the ship. We would provide hospitals if we were directed to do so, but I don't think that is our primary mission. We would not do anything like that with out being directed to do so. You are probably more aware than I am how long it would take to set up or activate a reserve hospital, equip it and move it.

Part of the challenge is what kind of agent is released. If there is a large respiratory challenge if they needed ventilators. We just don't have that kind of capability.

Q. Is Health Affairs the organization that would coordinate that?

A. We coordinate the policy part of NDMS. Dr. Bailey is the principal representative to that. We advise as her staff.

Q. What do you think the public expects?

A. Certain things are public knowledge…with some of the Anthrax hoax that have occurred. I think people expect we have a role. The news covers that. These Raid teams…I think people may have a little trouble differentiating between various components, but then it is still a military individual. So I think they would expect us to do that. So what I am saying is that the National Guard is sort of the 911 for state events. I did not see the movie, but wasn't the hot zone something to do with the military and the ebola virus? So if the public has seen or read that then they would have an expectation that we would be involved. And then hurricane Andrew for instance DoD played a significant role for south Florida. Rightly or wrongly, DoD is the only agency that can move people and equipment in short periods of time great distances. So I think they expect us to help.

Q. How do you think the military as a whole views their role?

A. I think there are different camps. There are some who think we should be doing more. For instance there is one that thinks that with the CDC developing the pharmaceutical stockpiles. CDC does not have the capability, so they are partnering with VA to use the their acquisition and distribution system to do that. There are some who think that DOD should be doing that. No one would deny that we can do it. We have

capability for inventory management, inventory distribution. We do well with rotating stocks so there are some who think that we should be doing it, but it is a civilian job. So the CDC should be doing this. The thought is that if we don't stand up to the plate and say put us in, we will be called in anyway. Now the VA is an excellent system, but it is different to be distributing and maintaining in a chaotic environment such as a WMD event. We do that in war...they do it in peacetime. So there are some in DOD that think we should and some who think we should not. Simply because we are not resourced to do it, it is not our mission to do it. And supporting the civilian environment takes away from our wartime requirement. What do you think?

Q. Well, it sort of falls onto my next question. How do you perceive the changing threat from conventional warfare to terrorism in regard to the DoD mission to fight and win the Nation's wars; What does it mean to the medical mission to "support the fighting strength?"

A. There definitely is conflict. If we are giving a larger role to play, we have to be given an offset, or the resources required to do it. If you have people involved with the stockpile, working with vendors, rotating stock, dating items. We need the dollars to support the personnel and these kinds of issues. You have to factor in is there an advantage to doing some of these things? Is there some training value?

Q. Our medical mission is to support the soldier on the battle field.

A. Yes, if we take the domestic support mission on, then we have to have some sort of a gap analysis made and trade-offs that have to be made. Of course if the President says that is what we should be doing, then that is what we will do, but we will have to have some sort of compensation for it. Or something will fall through the cracks.

Q. What is your perspective on what works well and what doesn't work within the current role of DoD in the Federal Response Plan?

A. I don't have a lot of expertise with it, with NDMS, but one of the challenges is with communication. There were some communication problems with the refugees from Kosovo at Ft Dix. It was clearly within HHS' responsibility, role and mandate to do it. There were some DOD folks that were leaning a little far forward. Now that is not an NDMS issue, it was probably never brought up before. Or stressed or tested...the communication part. Some of the things we bring to it is that in and emergency everyone pulls together.

Q. Can you identify your greatest challenge with DoD response.

A. One of the things DOD has to think about is that if an agent like botulism where we needed a lot of ventilator support, DOD and HHS may be competing for precious resources. One of the things we need to do is set up a policy or mechanism for deciding if DOD should have a priority, or HHS. If there is an antiviral agent, who would get it? Should health care workers, non-healthcare workers, civilians, military. There are all interagency kinds of things. Things that need to be deconflicted. I don't think we have done that. I know that there is a congressional there is a law on the books that talks about defense production act or something like that is produced in the civilian world that DOD to support our efforts. The biggest things might be the communication and coordination. I think the system we are setting up now...the NDPO, hopefully will have a one stop shop or one person in charge so that we know how everything is handled. Because right now, I can see it being sort of a fire drill with no one coordinating and no one orchestrating. So I think that would be a big challenge to us.

Q. Given what you have alluded to, what do you think needs to be changed to improve response in this new environment? If those recommendations are adopted, how might that affect other aspects that require military support? What medical planning factors we should be working toward?

A. I haven't really thought about it, but I do have strong feelings on the following. I have been involved in an interagency vaccine project. As you know we have been having a real problem with the farm to market vaccine thing. When we start with the idea is conceived, the R and D is done and the product is received it is about 10-20 years. I think we need to find a way to expedite that. We are working with the FDA on that , but we need to evaluate the safety and efficacy of the drugs. Secondly we need to investigate. You know originally WMD was just a military concern. Now it has obviously gone beyond that to the civilian community at large. We need to find a way for the production companies to come up with a capability to expand production. The companies are reluctant. Probably there is not enough compensation and they run the risk of getting sued. Then it has to do with the chemical biological treaties. It would require outside agencies to review their biodefense activity. So we are looking at ways to encourage new ways to do things. Maybe a contractor owned., contractor operated. But others don think that is the way to go. I personally don' think we should do that. Then we have the challenge for developing things. We need an interagency approach so that CDC doesn't have on way of doing things and we have another. You know one for civilian small pox and one for military. That does not pass any kind of a common sense test. There is a new recombinant strain of anthrax. We are working with the CDC on that. But given to its own devices, the DOD community and HHS will do their own thing. Fourthly, we are not going to be fighting by ourselves anymore. We need to be

looking at other nations. The British for instance are working on and anthrax vaccine and we don'' need to have one for us and one for them. We need to have the same. Who ever has the best is the one we should use. In terms of restructuring, I haven't given it any real thought. I am a believer of a militia nation. I am concerned about the nose under the tent, with us involved in the domestic arena. There is the civil libertarians that are concerned about posse comitatus, we are on the right side of that, but I have my concerns. On the other hand, maybe because I know us and know what we can do, what are capabilities. We will have to be involved. The way we have it set up with the JTF civil support looks like it should work. If the task force can do that as a support role. I think it is important to participate in exercise so that if the time comes we can do that role.

Q. Are you aware of the training that we do at the RTS MED sites with the VA?

A. No I was not aware of that. That would be a good piece to highlight at the April meeting. The other thing I want to do before I leave is to, you know one of Dr. Baily's prime concern if for DOD personnel. If something happened at Ft, Bragg or Ft. McPherson. If it is on a military instillation, that MTF needs to be able to respond. It just should not happen to have the Commander call the civilian emergency room. We need to prepare our installations that includes our ports and if there is a bio event, we need to be able to respond. We are trying to determine what proficiency level the commander, chief nurse should be doing. Should it be a JCHO requirement...I think so. Some of our own areas don't have any decon capability. We need to see that our own back yard is in order before we get too involved in the other. I know you are focusing on

CONUS, but we can not forget OCONUS too. Something that goes on in Kiserslaturan or Launstull, DOD has to be able to respond.

Q. Any further comments?

A. We really need a better interagency coordination…we are doing that, but we need to continue the effort to make it better. We need to focus on what is deliverable and what we need to do right now. The bottom line is that it isn't business as usual. The JTF CS looks like it should be the right effort. There needs to be a surgeon in the first to response team.

Interview # 3: Director of Military Support

November 1999

Q. *My first question is whether or not you believe DOD should have a role, again focusing on a catastrophic event, something like what we were doing planning for New York where we have an excess of 50,000 casualties. We're talking about the medical response, so what I'd like to know in the civil support arena, what your thoughts are on whether the military should be there, and then as you think about those things, and as we go on, if they do have a role - how much, how fast?*

A. In terms of military medical support? I think when you talk about an event that quickly exceeds the normal capabilities of the local and state, the military is used to going in to crises all of the time. They are about crises. When you start talking about setting up field triage points, securing an area that wasn't an area before for medical stuff, you can (inaudible)- that probably the military across the board is better set up for those type of quick set up of medical units. That's why we build them. We build them so that we can move them places and set them up very quickly. Our medical people are used to doing that type of stuff. One can make the argument that we paid for all that stuff. We paid for having this capability of which is a wartime capability. While we would use it while we have such large numbers of American citizens being affected. I guess on the outset I'd say I don't think it's a problem - problematics of using the military medical units in one of these catastrophic events. I don't see it as a problem in terms of costing us for the war fight. Anytime we use the military for other than a war fight, people always ask, Aare we degrading our capability?@ I think in the medical field and certainly in the engineer field when we use them for other things, we're actually getting them better trained for what their true mission is. The other thing I would say is, if we did use that military, I think there's that expectation out there when we have these large numbers of people dying that

where is our military and why aren't they helping? I don't see an issue. I think it's expected. I think we'll do it. I think in most cases our medical people in uniform are a little bit more prepared for this type of crises. The question is how do you work the interface between them and the other medical staff and that's where the interagency is going to have to work it out.

Q. Do you think that the current configuration of - I know that you're working in the arena, both on the military and civilian side of response since you're in the opposite area here, but do you think the current configuration works with the way the military is interfacing with the civilian side of the house on response for domestic terrorism?

A. I think it works. What you are doing is you are polluting a somewhat rigid military system that understands rank and process use and tactical borders and you are superimposing that or it's being slid into city/towns and state processes that are just a little bit different and not so formalized to the unobserved. Although once you get into it, you'll find that their processes are very formal, also and pretty stout. I don't see a problem with how we do it. I think the military should always come under an elite federal agency. I think that forces the military to have to adapt to whatever processes are set up by the other agencies they're working with. I think it's harder for the civilian agencies and processes to try to adapt to the military. When you take a look at the processes, the military adapting and how they do business to better serve the civil peace, I would rather do it that way than try to make them adapt to our way. I don't think it would work.

Q. You've alluded that the military can work to fit in with the civilian maybe more than they can fit in with us. What do you think the public does expect from the military?
A. I don't know. I know that there's great angst about what the real definition of homeland defense is. There are some people out there, I haven't met them, but there are

some people out there who think that the military in the streets, if we have one of these catastrophic events, they get some people very nervous. I think there would be no reason for (inaudible). I think that if we have an event the size that we think we might have, I think it would be a necessity to get the military in there to assist. Again, underneath the civilian control, but I don't know of any other force that could put the commanding control pieces in there and be a calming effect. It's not going to be pretty. In some cases, they're not going to let people leave when they want to leave. Who knows what decisions will be made based upon the type of event and it's going to take something a little bit more than a police force to be able to control the population so that you can contain whatever damage has been done. That's going to be some tough calls and we've got a pretty disciplined outfit in the military. I don't see another - anything out there that can change that.

Q. How do you think the military as a whole views the whole mission of supporting civil authorities for something like that? One of the reasons I wanted to talk with you is that you are in the position now, have significant impact on this and you're recently from the outside world of the military.

A. It's a distractor. Being an operational unit dependant upon what type of unit you are in is a distractor. If you're a combat unit. It's a distractor. If you're in some of the speciality fields, there is opportunity for gaining training events. I'll use an example of: If you are an engineer unit or a medical unit or one of the others, there are things that you can gain as military by interfacing with the civilians - a certain technology, technology transfer, stuff like that. But for the grunt on the ground, tanker, the artillery men, our Army is so small right now that we don't have enough to train on all the things we've

got. That being said, every time a soldier is given a mission like for Hurricane Andrew, they understand it. They go out and do it. They know it's short term.

Q. So what is your perspective on maybe what works well and what doesn't work well in our support to civil authorities under the Federal Response Plan. They have a lead federal agent?

A. I think DOD has done it right by giving the Executive Agent to one of the services first to be the focal point and the first gatekeeper to interface between civilians and military support for any of these disasters. What that does is that forces everybody in the building, there's one place they can go to, to force the process to work. I think now that FEMA and the FBI, DOJ, Public Health now have streamlined their procedures. The last two things we've had have been kind of easy in terms of getting the process done. It was kind of like a no brainer. They need this, within four or five hours, everything was done. That doesn't mean - on the ground it was tough work, very, very hard work. There seems to be less confusion now and a better understanding about how to get military under the lead federal agent. What could you have to go through? It seems to work very well. The question would be when we stand up to joint task force civil support and how that will interface here in the building, owned by a Sync, and how we integrate them at the operational and tactical level with lead federal agents to keep that kind of activity and hand off going, but still the approval process is held up here. We don't have our forces out in front of themselves too quickly before we get approval from the appropriate authorities. That will be the challenge, I think. Military (inaudible) will lean forward knowing that that's their single point mission, they're going to lean forward and get things done and we may get the cart before the horse a couple of times, if we let the process deteriorate.

Q. When you say that, that gets back to how much, how fast and if the catastrophic event occurs and as we look at it evolving, the hospitals become overwhelmed in a bio event, before anybody recognizes that an incident has occurred. And then, of course, there's a question of is it terrorism or not terrorism? Is it a weapon of mass destruction or is it not? What will happen and unfold as we look at some of the scenarios we worked. They call for assistance and immediately all of the hospitals are overwhelmed. The whole structure, the civil support environment is overwhelmed. The state can't manage it and they are going to look to the federal government who will immediately put the plan in operation and we fall in under that support, but what, if any, requirement do you see of us in looking at something like that. Not in one of the hoaxes where we're looking at, well we don't know yet, should we go or shouldn't we, but in a situation where, in fact, people are dying and without immediate assistance.

A. You know that each commander can make a decision without going through the process to save life or limb, or significant real property damage and stuff like that - each commander can make that decision. In cases of what you've described, we would expect the military, in this case say it's the medical, to start doing what he's supposed to be doing. But they would call and then we would do the bedding process up here. You bring up an interesting point and that's why I went back about the training piece. How much of this do we train medical units for this eventuality and if we just train them in their military task, would that be quickly transferred in this type of event? I would say, yes, as long as we have the right structure above them to interface in the interagency. I think that was why we used the RTS and that is why JTF Civil Support. So that if you are a field hospital commander, for an example, a medivac unit or something like that, if you're training every day in those tasks for your wartime mission and all we need to do is that you're falling in on an urban area of which you do in wartime also. You're not witting of the process if we can just chop you to a joint task force and let that staff work that piece and you, as the hospital commander, won't have to do anything but deal with patients. That is the balance that we've got to figure out. There will be a great

expectation by the American public that we will be (inaudible) so people are going to take some risks. They're going to have to start moving things a little quicker. That's why we think the process right now works. Before the hurricane ever hits, we're doing stuff. As soon as we hear that Intel picks up, we're making early decisions front loaded, ready to drop, in case. In terms of the chem bio attack, as you know, it could be three or four days before we figure it out what it is down in the hospitals and then it's too late. People will know we're late and there's not much we can do about it. The same analogy on this civilian control of the military in these crises - should we be doing it? Should we be trained to it? We ask the question on account of narcotics. The same question. But I think if you take a look at the military expertise that we would bring to the table in chem bio, it is much easier transferable. As long as (inaudible) agency crosses there and there is a layer, using RTF (inaudible) that is trained interface and make a smooth transition. The doctor - he's not going to know the difference. Well, at least we hope he (inaudible) to know the difference. You know, the entomologist who's going to go out there and do his thing, he shouldn't have to worry about what's going on with the mayor or somebody else. Someone else should have to worry about it. In that way, I'm hopeful that the JTFCS will ease that, but that probably just defined the role. That's what they ought to be doing. Then we won't have to stand up all these units headquarters all the time to plan these events. All they need to know is you've planned - you'll be falling under this JTF and they will give you military orders and they understand that. You've got the JFT that is translating civilian type stuff into military type orders. That to me seems how it will work.

Q. Can you identify maybe your greatest frustration right now when you look at your observations of how we would support the civilian environment.

A. There is a reluctance to make it look like the military is in the lead. Let me say it differently. There's a reluctance sometimes of the signature on some of these events, the signature of the military because people think that we - some people believe that we're vying for more missions. For the military side, that's not the case at all. It's just that when we're given a mission, we like to get in there and take charge of the piece we're supposed to take charge of. Every time one of these events comes up, we really bet what the size, what the signature, what they can do, what they can't do. Now, you asked if it was frustrating. Yes. Is it necessary? Yes, because if we didn't have that process, we could get out and be stepping all over ourselves. It's a necessary evil that we need in the process. Frustrating? Yes. You can sit there and say, AI should be able to commit this force right now, because everybody needs it@, but I have to go through and get all these chops. Can't they see that they need it? Everybody says yes, but we still have to go through the process. Now, what that has made us do is it has made us streamline it and front load it quite a bit. But I think that frustration will always be there. It is a frustration of the military mind to have to get too many chops and consensus whereas we're all taught to be leaders and we just say, I see what I've got, I plan my (inaudible), I'm ready to execute, I don't need to wait on you people. That is the frustration part. Having been here now four or five months, I understand why they do it. You could make a mistake and you're not going to be the one to answer for it. It's going to have to be someone on the third floor. By the way, there's been thousands of these requests and they've got some great expert (inaudible) that can see the second, third and fourth quarter cascading

problems if something goes wrong. It is a frustrating process, but a necessary one. I didn't think I would say that two months ago.

Q. Any conflict with the war fighting mission? I think that you've kind of alluded to that before, but any further thoughts on that?

A. In WMD piece, what we're doing with DOMS, I don't see any conflict with the war fighting mission. Again, if we have to put troops in the streets, God forbid, that would be something that we had not trained for, but we did it because we're trained to be disciplined and they have a command and control element and they have weapons (inaudible) how to do business. I don't ever see us training for that type of mission. That would be a quick reaction type mission. In the specific fields of technical escort unit type stuff, special type of engineering, special type of medical. What we're doing with the raid teams with the National Guard. Now, we've created that as a special mission so that is their wartime mission. In the congruent areas, chem bio, medical stuff, I think any change or exchange would do, it's got to be good. I'm sure the doctors are doing it now, we just don't know it. They're down there communicating with each other and sharing stuff. I don't think it affects our wartime mission because we're not talking about committing large amounts to these exercises. What we're really committing is that staff has learned how to interface. That's the commitment we're making more than anything else if you get right down to it, is the staffing process so that when we do commit the military, at the tactical level, they're still getting orders from headquarters like they always will get. It's the headquarters that is doing the translation of civil requirements and tense and orders into military orders so they can go execute.

Q. So with the medical organization, at least in the Army, to their mission to be to conserve their fighting strength, but their main mission is to the soldier on the battlefield. Is there a conflict there?

A. Not unless we're in combat. I would argue with you that if we have a terrorist attack, we'll probably be in combat here.

Q. I was going to ask you to define what a terrorist attack is.

A. If this is a terrorist attack against the United States, I don't think we'd have any trouble committing everything. That would be their mission. Unfortunately, it would be to save American civilians versus American soldiers, but the strike took place on our - and that goes back to Homeland Defense. What is really Homeland Defense? I don't want to go there because I don't understand it yet. I know it's out there, but military support to civilian agencies to me doesn't mean Homeland Defense. It is something entirely different and I'm not sure where we'll go on that one. But I don't see it affecting the wartime mission. What we're doing with the DPP and the RAID teams...again that was set up so that is their wartime mission. That is an additional unit. It wasn't a unit we said, Oh, by the way, you've been a wartime mission, now you change to a peacetime mission. We set that up so it would be that mission.

Q. Thank you. Any other comments?

A. No, I'm glad you're writing this thing and I'm not.

Interview # 4: Special Assistant for Civil Support to the Secretary of the Army

26 October 1999. * interview was not taped, following comments are from notes

Opening statement by Interviewee: The primary barrier to the use of military assets is the fear of military takeover. Look at Waco. The checks and balances are there for a reason.

Q. What is your perspective on what works well and what doesn't work within the current role of DoD in support of domestic support?

A. FRP is a great document/template. The Army as executive agent in MSCA is not broken. The FRP is working better now than ever before. Now that FEMA has the money for reimbursement, we can afford to respond. I would guess that the weakest link in the response process is the medical community. We have some problems interfacing with the civilian structure. DoD is well organized to respond. It is our ethic. Dr. Hamre gave up DP program because it is not a "warfight mission." I believe some of the underlying reason is our concern for public perception of military takeover of civil liberties. But for those who understand the way things work, the President is our Commander in Chief...he will define the role. The civilians ARE in charge of the military...we really need to stress that point...civilian leadership is in charge of the mission.

Q. Define your perception of the role of DoD; how much , how fast? Does the current configuration work?

A. The reason we (DoD) are not first responders is that we need the checks and balances to maintain control of the military aspects...again perception that the military is taking over. If we would preposition assets, who pays; what are the legal issues? The lawyers are uncomfortable with the immediate response clause 3025.15. But our

commanders have good judgment. They have a lot of experience. This is a highly visible issue. USAMRID was slam dunked for responding to requests from NYC to assist in identifying the encephalitis in the bird population. We have over bureaucraticized the implementation of the process. We need a "be prepared to execute" order...and exception to policy process, especially in the medical community.

Q. Can you identify your greatest frustration with DoD response.

A. Emphatically...We recreate the wheel every time we have a disaster! We do an after action review, but never put the lessons learned into place. Future concerns focus on timeliness and coordination of service assets. Then we have to identify when an event is a WMD. Currently we have a lot of false requests. We can not send DoD assets out for every bag of powdered sugar that is suspicious. There are a lot of misperceptions in the private sector regarding the responsibilities of the different elements within DoD.

Q. How do you view any conflict with the warfighting mission?

A. Response to a domestic WMD is part of the mission of DoD. The traditional "warfight" mentality has to change. Just because it does not go "boom," and require weapon systems to respond, does not mean it is not our job. The threat is changing. The best way to change is to put it into the quadrennial defense review. If the money is programmed, the force will change. Take a look at the Marines. They will grab the mission. Look at what they do...State Dept, Embassies, somehow they take care of the job. The unified command plan is the first step. The Chief of Staff for the service will lead. Then we need to do what we can to coordinate our activities.

Q. Do you have other thoughts or comments at this time?

A. You need to look at the interagency. Talk to FEMA; talk to the FBI. The interagency has to work through this. DoD is a large part of the support. But we are not in the lead. Also, we need to take care of the issue of vaccines for the first responders: It comes down to dollars. If we really want to have more vaccine, we need to do what it takes to ramp up the pharmaceutical companies.

Interview #5: Acting Deputy Assistant Secretary for Reserve Affairs

29 September 1999

Q. Define role of DoD; how much , how fast? Does the current configuration work?

A. Yes, absolutely, the Department of Defense has historically provided support to civil authorities for natural disasters. I guess I don't see the origin of the event, causing a situation where we would not provide assistance, so regardless of whether, say we had an outbreak of an epidemic proportions, whether we could determine that that was caused by bio terrorism or determined that it was a naturally occurring event it doesn't matter. We're still going to need the same resources to, be brought to bear. So yeah, the Department of Defense is always going to be there as the resource, obviously under the federal response plan and a medical situation, we are not the primary provider that the Department of Veterans Affairs and the Department of Health and Human Services have the leads, but we'll always be there in a supporting role.

Q. How soon, how much, how fast?

A. Well, I mean I think one, we have to recognize that our personnel are designed to meet a mission requirement and the mission requirement is to defend the nation in war time and so to some extent you're always going to have to evaluate what your resource is on any given day and based on the other requirements for that resource. That being said, the issue is what part of your resource can you get to the four immediately and the answer is going to be generally, the active duty part of that resource. Now governors may well utilize medical resources within the National Guard structure early on as part of a state response, but as far as getting to the federal asset, it would take us longer to get the reserve assets and frankly, if it were determined that it was a naturally occurring event,

we could not use reserve assets. There's a specific statutory prohibition that prohibits using federal reserve component forces for a natural disaster response. If it's a weapons and mass destruction response, there's specific authority that was given to us a year ago to call up reservists, but as you know that would take much longer than the immediate go and get out the door and do something.

As you know in a bio event, it may be a long time before it's determined whether the event is a naturally occurring disease. If we take the New York scenario, where the hospitals are overwhelmed and we call for federal support. It's going to be 48 to 72 hours bringing in the federal assets. And, it may be days longer before we decide whether it's a, its a WMD terrorist event or whether it's a wild strain of the flu or until you make the decision to declare it a WMD event, you're not going to be able to get access to your reservist.

Q. So there's the question, I guess, do we need to do something to be able to access them?

A. Well, we tried, when we went to Congress, what we proposed was that they give us the ability to call up reservists for an additional 15 days, because we figured you know, one of this sorts of events that's probably what we need them for, is a very short period of time. Congress in it's wisdom decided that, the Secretary of Defense should not have the unilateral ability to call people to active duty for more than the 2 weeks a year training. And therefore, they gave us the PSRC authority which means you have to go to the President and to get him to do the call up and only then for a WMD, so I don't, I don't see Congress being inclined to walk away from it's position, it's held that pretty firmly for quite some time. Before I arrived on the scene, the Department had tried to get

Congress to authorize the SecDef to call up to 25,000 reservists. That hit the skids on the hill.

Q. Well, I guess the end of this question is, does the current configuration work from your perspective?

A. Well, that depends on what you want it to do, I mean if I want to be able to get my arms around a whole bunch of federal reserve force or any sort of event that occurs in the United States, be it natural or man made, no it doesn't work because of very specific prohibition.

Okay, so then the current configuration, if we describe an event where the country's overwhelmed, with the current environment in the civilian medical community, moving toward just in time logistics, limited hospitalization, and beds turned into offices, we don't have a strong backbone in the civilian wall.

Now, the MDMS system is built as a symbiotic system between the military, Veteran affairs, HHS and the health and human affairs. But the preponderous of the army medical system is in the reserve, so you can't get the medical system. Well, I mean, you could get it assuming you hadn't done it's annual training, then you could call it up for 15 days. So if an event occurs early in the fiscal year, we're covered, you know you're covered if it occurs at the end of the fiscal year, you're probably in deep do-do. And I know that sounds flip, but I mean really, there are only so many ways you can get reserves on active duty. Clearly, they can volunteer and you can probably access some of them by volunteering and doing, paying man-days that sort of stuff. The next is you call them to active duty for their annual training, because you can involuntary bring them in to do that. Then you know the next involuntary plateau, is a Presidential reserve call

which will get you up to 200,000 for up to 270 days. But not for domestic, other than a WMD domestic incident. That's the way the statute is, so what would have to happen is that whoever is making the determination, if the reserve component was that critical, would have to determine if this appeared to be a WMD event.

Q. What do you think the public expects?

A. Oh, I think the public probably expects that it'll be taken care of. I think this is a society that has very elevated expectations. You know we, we see our expectations gratified on television programs and things of that nature that everything is always well. I mean you don't have a lot of tragedies on television every night that don't end well. So I think they expect that we've got this plan. We're starting to educate people about that without panicking people. I suggest that we really need to spend a lot more time thinking through these things. I think that's what the public expects.

Q. How do you think the military as a whole views their role on domestic issues?

A. I'm hesitating because you've got that qualifier in there, as a whole. I think that the military and it's leadership understand, recognizes and appreciates that they are a resource. I think that a perfect example of that recognition is the establishment of the Joint Task Force Civil Support which just, as you know, is just sort of, a recognition of the guard and reserves are the forward deployed force in America, I think was acknowledged by appointing General Lawlor, a National Guard, GO, lawyer from Vermont to be the commander of that task force. So, I mean I think that if you use a whole, meaning the leadership, I think the leadership understands and appreciates that we will be called upon to provide military resources to support civil authority in the event of some sort of catastrophic event in the WMD arena.

I think that we have even in our discussions, have focused more to date on a chemical event than a bio event, and we haven't really focused our discussion even on a nuclear or radiological event. As you know, they're all uniquely different in whether you keep people in or get people out.

Q. What do you think the combatant commanders, and the unit commanders think when we consider the environment now as a consequence management scenario. What is the role of the combat force? How does the combatant commander look at that as his mission?

A. I don't think he does, at least not yet. I'm not sure that within the homeland we have yet clarified the mission. And essentially, what we've done to date is Donna, is that FEMA will, the Federal Coordinating Office will say, you know, I need, this. I either need some stuff or I need a capability and you bring it in to the Department of Defense and we say, okay, we can move your, Virginia power trucks to Northern New England for you know, an ice storm, by C130 or C141or whatever. I mean and that's the sort of stuff we do, you know you might say yeah we need x number of some item, yeah we'll find them, we'll get them, we'll fly them, we'll operate them, that sort of stuff. We've had a couple of commanders that have obviously had to be involved in riots in Los Angeles and stuff like that. But generally speaking, most commanders are not looking at civil support as an aspect of their mission because it's not part of their war plan. And that's what they're training for and that's what their C ratings are predicated on, is what their war plan mission is. Now, as we get some firmament to Joint Task Force Civil Support, as we bring some conclusions, from the RCEO5 study, a number of facets of which relate to mission issues of reserve components as in a biological WMD. I think we'll have a better idea and then there will be some commanders who'll be able to be

fairly articulate about why have a dual mission. But I think that we're starting to see it in the Army reserves with the training identification and training of these chem bio, decon, recon units that are starting to get some unique equipment for working in a civil, urban environment and stuff like that. But we're in the beginning stage of that. Now we have some commander to go the tech escort commander or an EOD commander or the CBIRF commander and those folks can tell you pretty effectively where they see their mission in consequence management. But they've been doing it for quite some time.

Q. So, is it culture, is it education?

A. Well, now I think it's missioning, most military people aren't trained to interact and work hand and glove with and be in support of civilian authority. I mean that's why JTF civil support, in my opinion, is a good idea because what it is, it's the next evolutionary plateau of how the Department of Defense interfaces with civil authorities and bear with me and I can kind of lay out, at least this is my thesis of evolution. We started with something called the Defense Coordinating Officer, which is generally an army 06 active duty. We send him to Berryville, Virginia, for a week, and we train him in civil support concepts, instructions, inter agency, interface, that sort of stuff. That's a collateral duty job. He doesn't do that all the time. He has some other job. He's probably a training support brigade commander or something like that. Then if we have a disaster in a state within his AOR. We call up and we say okay, the President has declared a federal disaster, there's a federal coordinating officer and you're designated as the defense coordinating officer, you go out and do that.

Well, there's the senior military person on the ground, liaising with the civil authorities who has no concept or clue about military support civil authorities. Well, as

the spectrum moves, you get into a bigger event that is overwhelming. Hurricane Andrew is the example. So what did we do? We called up a two star and he was a rear Admiral as a matter of fact in that instance. We called him up and said, you are the Joint Task Force Commander, get down to Miami, take command because we're rolling in all these military resources to assist civil authorities. He doesn't have a clue. He has never had any training, he doesn't have the slightest idea about the laws, what posse comitatus is, you know that sort of stuff. But he heads on down there, he takes his staff and of course his staff doesn't have a clue either. So you know, he's got his JAG studying up on the way down, that sort of stuff. We said okay, well, you've got to be able to do a better job than that. So, then we get to Atlanta and we know that the Olympics are going to happen, so we can anticipate the potential for an event, and so what we do is we create a response task force for weapons and mass destruction under the auspices of the first army and it's maybe 80 people or something like that, and they train, and they come together and they train a few days a year.

When it started, they were from various places in the Army, you know they come out of Fort McCoy, and they come out of Dix and they come together. But they were still collateral duty. All right. And as you, I'm sure you know, we have one of those at first army now, we have one at fifth army, he's RTF WMD's. But they're still collateral duty. So, for the first time, in this entire evolution, now with Joint Task Civil Support, we have some people in the army who are going to be designated and work full time to be the Command Headquarters element for any military forces called upon to support civil authority and that's what's so important. They work this every single day, they interface with state and local governments every single day. Is it a big deal? It's not a big deal in

here comes the Department of Defense charging in, but it's a big deal in command control and understand the awareness of this. Yeah, there's the first Commander who full time worries about support the civil authority.

Q. What is your perspective on what works well and what doesn't work within the current role of DoD in the FRP?

A. I think things that work really well are things that have been exercised, so people know each other, they know who's doing what to whom, they know in some sense, who's in charge. What doesn't work well is to have an entire gaggle come to an event and have to spend the first 2 or 3 days playing touchy feely with each other because they've never ever done anything together before and that's another reason why JTF is going to be good is because it'll get out there and be involved in exercises and learn who the rest of the players are they'll be working with. That works well when it works. I mean we've seen it in every exercise that we get into where it takes the first couple of days for everybody to sort out the turf. Unfortunately in a real life event, a lot of people are dying when you're sorting out your turf. A perfect example is TWA versus Egypt Air. I mean the FBI and FEMA, I mean NTSB working entirely differently and TWA, and they worked well cause they were used to working together, that's good.

Q. As you talk about the exercising together, our joint doctrine has established how we do host nation and coalition support exercises and training. Is there an analogy that we can draw from to relate to civil support?

A. Well, as long as you did it within legal constructs. Yeah, I'm just not sure that it becomes the same model, I mean because you're, you're talking about combined and joint military forces. Theoretically they all have the same basic abilities to do the same basic things because they always, everybody brings certain skills at the table, and that's

how you put together whatever the battle force is, but here you're talking about military structure that is subordinate to civil authorities, and that doesn't mean that a civilian gets operational command of your force. But it just means that you're not in charge. And you're dealing in a republic where the mayor thinks she's in charge and the county supervisor figures he's in charge and the governor insists on being in charge because he's the guy that gets past the President to declare the state a disaster. And you know, under none of those circumstances, is the military in charge. And we're not theoretically there until after the President makes some form of federal declaration.

I think there are interesting issues of how you employ the National Guard because it's been schizophrenic. You know you'll be wearing the state hat for a while and then all of a sudden, it may get federalized and then the political aspects of the National Guard get shut down and all of a sudden, they got a UCMJ involved. So there's a lot of those issues that are going to have to be worked.

Q. I guess that's my next question refers to your greatest frustration or the biggest problem you see in a civil support mission both on the civilian side and on the military.

A. Well, I, I think the biggest problem and this is military unique, is getting your arms around the catastrophic event. I mean we just have never contemplated a catastrophic event. I mean think for a moment if we had an earthquake of the dimensions that the Turks had with the equivalent amount of demolition and destruction. I mean the arguments would be, well we build our buildings better, that wouldn't happen, but you see that's always talking away the problem. If you know, if you did that, do we have the ability to be self sufficient in that sort of situation, probably not. We don't have enough urban search rescue teams. And they would be consumed very rapidly. Do we have any

military resource urban search and rescue? No, they were originally military. We turned that over to FEMA. I think the first thing is, is contemplating, understanding and appreciating the dimensions of a catastrophic event in the United States. Murr Federal Building wasn't a catastrophic event, that was a tragedy, but it wasn't catastrophic. The World Trade Center could have been if they'd done it right. The first thing is to have planners envision that sort of catastrophic event and then try to anticipate how to deal with it. And it's hard to do because everybody always thinks of the infrastructure will be secure whereas if you take a look at the New Madrid fall, you know what you need to do. Go down and get the Red Cross Study on the New Madrid fall, they did it several years ago. Because if nothing else, it gives you, gives you real jumping off point for catastrophic natural disaster events. I mean they were talking homeless of 1,500,000. You know every infrastructure pipe coming across the Mississippi, destroyed, bridges destroyed, the whole nine yards. And I mean that, there's a catastrophic event and what did they figure, it was too hard.

But then you know, all that said, the military has the most organization to it; structure, a command and control process that works effectively. I mean it will come to the four, it'll just be a question of how it is utilized once it gets there. We can move stuff, we got a lot of trucks, you know that sort of stuff.

One of the other things that I see, and you know obviously I wear my reserve hat, is if we're going after medical resources, how do we know when we call them to duty that we're not yanking them up out of the hospitals where they're working? How do we be very selective in making sure, we're putting anybody out of an area where they're

being utilized for a civilian role? We saw that when we were called upon for Desert Storm and we were yanking them out of VA hospitals.

Q. How do you see any conflict with the war fighter mission?

A. Well, if your dual mission, I mean, you either have a consequence management homeland defense mission as the exclusive mission or you have a dual mission. So, you have a war fighting mission, perhaps you're in a strategic reserve, and you have a consequence management mission. We're still working those issues, that part of our CE05, as a matter of fact, to identify how we're going to mission these organizations, and the only consequence management missioning of an organization with exclusivity are the RAID teams. Having said all that, there are some folks on the Joint Staff that say if they need one OCONUS, they'll take it. I say yeah, but you've got to federalize it so you're going to have to PSRC it. But, we're not there yet, we just don't know those answers yet. I think there's some concern within the guard community, that some of the citizens are concerned thinking this is just the way they get us out of combat arms, and that sort of stuff. I mean this is critically important issue, in fact, John Hamre and Pam Berkowsky just did a big interview this week media people talking about consequence management which you'll probably be able to get in the next couple of weeks.

Q. If we had a CONUS based event and at the same time had one of our hot spots, an MTW's take off, any comment on where you think priorities would be or how our medical mission that is to conserve the fighting strength would be influenced?

A. Right. I mean I think any, any of our military mission requirements necessarily have to met. And if we're in one MTW, we've still got some force in some resource that can be utilized. If we get into two MTW's, we're in deep do do because we've got also all these small scale contingencies which is one of the reasons why we are looking at

finally defining what constitutes strategic reserve. One of the things that we say is ancillary to this strategic reserve is homeland defense. But I mean it is all very pertinent that you ask these questions. Those are the issues that we're grappling with right now.

Q. Do you have anything else to add,, any last thoughts on major things that stand in the way of getting this implemented what would you do first to fix it?

A. Well, quick fixes don't work very well in large organizations. We need to clearly delineate homeland defense missioning, civil support missioning, however you want to call it. I mean JTF civil support isn't expected to be up until April. Now and then they'll start really focusing some of those issues. Forces Command will have to really become engaged working with JTF civil support. The Chairman of the Joint Staff has to become engaged. We've got the catalytic force right now. It's RCE05, which is driving the Joint Staff, US policy, and JTF civil support, to really try to figure out how we articulate missioning for these units, but if there is frustration on my part, that's what it is. We have been very good on the rhetoric, and we haven't been good on the follow through of, of really deciding how we mission because we've never done missioning. What we've done is, we've taken the entire inventory of our force and well, you know, DOMS will throw something at a fire, a flood or a hurricane from the force. But we've never said all right, we're going specifically train components of this force to do homeland defense and be in a support role to civil authorities and we need to do that.

Interview: # 6: Special Assistant for Civil Support to the Secretary of Defense for Manpower and Reserve Affairs

Monday 29 September 1999 * interview was not taped, following comments are from notes

Q. First of all, do you believe that the Department of Defense has a role in the scenario described?

A. Yes, Absolutely!

Q. Can you share with me how much, how fast? How do you see the current configuration enabling the effort?

A. There is a remote, but real threat. When the locals are overwhelmed, you need a timely response to change the outcomes. The military has a support role. The other federal agencies lead. It will take time for them to get there.

Q. Mr. Hamre, Deputy Secretary of Defense has said that the reserve components are the forward deployed force for domestic response, how do you think they fit into the overall response?

A. Well the problem is that you can't get to the reserves quickly. They have a lot of capability, but they take more time to get there than the active force.

Q. What do you think the public expects?

A. Right now they are afraid of a military take over. However, if it happens, they will be the first to shout...where is the military?

Q. How do you think the military as a whole views their role?

A. Which part of the military? You need to ask the Chief of Staff of the services what they think. The marines are out in front. They are agile and accept a changing mission. The concept of war is changing. The tanks are not coming over the hill any

more. This is a big bureaucratic organization. The changing threat takes a long time to sink in. Change is slow.

Q. Our medical mission is to support the soldier on the battle field. How do you think that fits with a civil support mission?

A. It depends on what you call the battlefield. We need to define the threat, the war, and the battlefield. You might find that we are poised for a different century.

Q. What is your perspective on what works well and what doesn't work within the current role of DoD in the Federal Response Plan?

A. First of all it should be called a Federal Support Plan. We need to help to change the perception that we are there to take over. We could stay out of the political fire fight if we could stick to support. As soon as anyone thinks we are there to take over, the issues get sidetracked.

Q. Can you identify your greatest challenge with DoD response.

A. We are simply a big bureaucracy. Change takes time. We have to put the wheels in motion to change the organizational definitions. Then to change the way we do things based on the reality of the threat. Lets just hope we have the time.

Interview #7: Department of Health and Human Services, Director, Office of Emergency Management

September 1999

Q. The first question I have to start with is - do you believe the DOD has a role in supporting you and if you believe they do have a role, can you give me an overview of what you think that role should be or what that role is?

A. There are a lot of different places where DOD has a role because we have a fairly unique situation. First of all, DOD is part of ESF 8. In the Federal Response Plan DOD is a supporting department to HHS or Health and Medical Services. By Federal Plan and by decision of the President, DOD is a supporting agency. It's also a partner agency because we have meeting some of the major resource needs in the ESF8 is for health medical services and the National Disaster Medical System plays that role. That's a unique entity made up of DOD, HHS, FEMA and NDA. We're really coming at this from two different perspectives. NDMS is unique because it serves two functions. It serves the military contingency function and it serves the domestic function. During a medical contingency, I report to the Assistant Secretary of Defense for Health Affairs. During domestic issues, I report to the Assistant Secretary of Health of our department. Actually, the U.S. Military is a partner in a lot of what we do. It can serve in a variety of different roles. It can serve in the role of providing personnel, equipment, supplies. It is responsible for providing transportation and it can also provide for the management of patients once they have been distributed to local hospitals. DOD has both Army, Navy and Air Force Federal Coordinating Centers that are actually part of the command structure within DOD and that have a responsibility for arranging for private hospital beds as part of each one of those FCCs. In that capacity, DOD will be supporting HHS in

housing, distributing, tracking, housing, both civilian and military patients in those hospitals. There are all those different roles and then there are a variety of roles beyond that, but maybe we should stop there. I see that as being critical to the basic capability.

Q. Do you see any conflict with the role of DoD in support of HHS and their role to support the war fight?

A. But this whole system that's out there, that includes all of our resources as well, has also got a mission of supporting the war fighters. If it's activated for a military contingency, we're supporting the war fighters and can hospitalize up to 100,000 casualties. If we have a big domestic earthquake, we can hospitalize up to 100,000 casualties. The real issue is if we have a military contingency and a civilian contingency at the same time. How do we distribute the resources? We have never had to confront that question.

Q. Military medical planning allocates resources against the battlefield scenario. Have we done any planning that looks at the civilian environment we do a major theater war?

A. This is a wonderful symbiotic relationship. There are a lot of things that we can learn. There are a lot of things that we make mistakes about because we are searching to see if there's a one-to-one parallel between the DOD experience and the civilian experience and there isn't. Hence, we can make a lot of mistakes, but basically the resources that are available have been worked in either environment.

Q. Dr. Hamre talks about the Reserve components being the forward deployed forces for response. Just as we have forward deployed forces for war requirements, he's mentioned in a lot of his speeches about the Reserve components and the forward deployed military forces. Reserve components, so he's talking Guard and Reserve. Of course, in the Army, the preponderance of our medical assets are in the Reserve, not the Guard, so the Guard has limited medical. Do you have visibility of that issue?

A. That is really a problem for this great team concept…that is if we can't get to the reserves. But I can't tell the difference. I just need to know you can support me when I call.

Q. In past conversations, you said that you had a memorandum of agreement that seemed to be in conflict with some of the FEMA understanding of transportation support and DOMS concerns. Can you discuss the issue?

A. We have the National Disaster Medical System which is an arrangement made with TRANSCOM and others. This system is a pre-agreed system, so I'm not quite sure how all this is going to get activated. Probably through one of the CINCs, not through DOMS because DOD is a direct participant in this system. It's not clear to me how.

Q. ESF8 says we do support you. What seems to be the problem?

A. That's right, but in NDMS, it's not only that you support us, but that very specific roles are all spelled out and who's going to be doing what. TRANSCOM has got to move patients whether they like it or not. That's the agreement.

Q. Under the Federal Response Plan, transportation is addressed in ESF 1

A. We will use NDMS.

Q. So what you are saying is that NDMS agreements for patients over rides other transportation agreements.

A. Right. We're talking now about moving patients which is a unique kind of transportation.

Q. So it seems to me there's a conflict from maybe what DOMS perception is?

A. I have no idea. We're going to try to start sorting that out. One of the things that the exercise we worked on was going to do was exercise that piece so that we could

indeed see how it is going to work and if it doesn't work, to fix it. It's clearly not working right at the moment.

Q. From your perspective what works well in getting to DoD assets? And what doesn't work so well?

A. Our relationship with healthcare has been excellent.

Q. Who is your primary point of contact in healthcare?

A. It has been Major General Claypool, but his farewell is tomorrow. Then it was Rich Bushman. Now I understand that they're going to put a two star PHS officer in that position so it should be easier.

Q. What would you suggest? - I guess that you just said that your relationship with Health Affairs is good, but some of the details of how this comes together?

A. We're trying to - We've never had an operating manual. We've been working hard at trying to get some of the doctrine put down on paper and we're getting very close to it. The first time ever we had an FCC Operating Manual - our operating manuals, VA and DOD have linked up to get at one common manual for both the DOD Federal Coordinating Centers and the VA Federal Coordinating Centers. I think we're now at the point where we can - the only remaining big issue is, How are we going to pay for this? When I'm talking about pay, it's not so much the TriCare pay because we'll pay for all the military personnel that are hospitalized in civilian hospitals to TriCare. That will be the agreement. It's for the non-military beneficiaries going into these hospitals. How are we going to process those claims? That's a big issue and we haven't addressed that yet.

Q. In bio terrorism environment?

A. Whatever the use of the system is.

Q. But they're still considered emergency patients, right?

A. You have two choices in NDMS. We can either take immediate casualties and move them out and hospitalize them elsewhere, outside the disaster area or we can transport chronic patients out of existing facilities in the disaster area, non-critical patients, move them and put the acutely ill disaster victims in their beds. So we could manage it either way or some combination of the two. Or, we can move in auxiliary hospital facilities. That would be the third option.

Q. Do you see a role when you look at the capability of your DMATS and the NMRT and their ability to stand alone for 72 hours without resupply? How do you see DOD and VA that move in to assist them after that time, if we talk catastrophic bio event?

A. We're asking them to be able to be self-sustaining for 72 hours. No supplies whatsoever. No water, food, shelter, personnel - nothing for 72 hours. After that they will be supported. So they remain in the field, but they will be supported unless I don't understand your question.

Q. Who supports them?

A. We will

Q. More personnel from other DMATS?

A. No, we have an entire logistics and supplies approach. It's not that we will replace those personnel. They will eventually be replaced, but we will be able to bring them food, water.

Q. I guess I'm talking about personnel - to supplement them.

A. Personnel. We make all the arrangements here. We do all the staffing from here. We make all the personnel decisions from here. We make all the decisions about which units deploy and which don't.

Q. Okay, but giving an overwhelming requirement of a biological attack scenario with 50,000 plus victim, would you - you would run out of personnel? The bio incident would stress multiple areas. The concentration may be in one city, but the impact would be spread out with other jurisdictions competing for resources.

A. Our resources aren't limitless. We would have to be backed up by DOD resources, too and VA. We have 26 primary care teams of 35 people that can deploy - self-sustainable teams. It's not enough to meet the requirements of a large-scale bio incident.

Q. That is the focus of my research. In DoD's support role, they must be aware of your needs for support.

A. There are not a lot of DOD resources. We wind up - for the hospital ship to deploy. We get called frequently to come and fill in behind it.

Q. Our resources are finite. Probably our greatest strengths are the community support of the reserve forces once we're out there.

A. And that's what we recommend as being essential, too. We need the reserve staffing. I'm trying to change some of the doctrine about how the whole of the Public Health Service is organized. We have 6,000 officers on duty and 3,000 reservists, all health professionals. We can't afford not to tap into that in an absolute catastrophic situation. Unfortunately, our department is not organized like DOD is organized. We don't have the kind of parallel command structure between the joint chiefs and the civilians in our department as you do in DOD, obviously. I've talked to some folks about reorganizing certain aspects of the reserve and about how we can reorganize the department structure commissioned corp so that we actually have a separate emergency command structure that will be parallel to a civilian structure. I don't know how we

would begin to work that out, but the way we've done it so far, at the moment is I've got an additional thousand officers whom I can call up out of active duty and deploy to the field, if needed. I have 7,000 civilians out there and a thousand commissioned officers.

Q. I'm not as familiar as I'd like to be with your strength. It is important to take a look at what DOD support you need -

A. What I'm finding is that when you actually look at some of the readiness that we have and scratch the surface things are a little different than we may think. Right now, I think our readiness is far greater than it was three years ago, but it still has a long way to go. Frankly, after being supported by some of the Reserve Units, in fact, even the ones that went out of Fort Dix, those units were not ready units and they were being deployed. The equipment wasn't working. The personnel weren't prepared to deal with that kind of crisis. It really makes me think that we're in the same boat. We have a lot of readiness issues that we've got to look at jointly. I couldn't believe it.

Q. There were Reserve medical teams there?

A. No, regular. Right out of Bragg.

Q. I thought you said they were Reserve.

A. Some of them may have been Reserve personnel. One of the things that they may have done on the equivalent side and we've got to work out the same thing, is there may have been - I don't know what cache they used - and it may have been a cache that was mothballed up at Dix. They brought their personnel and pulled out that equipment. I don't know, but it raises significant questions, in my mind. Folks weren't as ready as I thought they'd be.

Q. What then might you speculate as some of the greatest frustration or the barriers that you see working with DOD?

A. There are a couple. One is that working totally within a military environment is totally different that working in a civilian environment. I'm sure that civilians feel that they can work without any problem whatsoever in a military environment and certainly military personnel feel that they can work without any problem in a civilian environment and it really is a totally different fish bowl. Somewhere along the line, in order to be effective, if that's going to be the role, some of the military officers are going to have to really have some kind of preparation for being able to adapt to fitting into that kind of environment. It's not something you can intuit. And yet the risk is that you believe you know it just because you live in a civilian environment. It really is very different. What we have is a lot of misunderstanding.

Secondly, a lot of folks in DOD - (tape turned over) once again to a situation (inaudible) feel that they're in charge and yet I understand that how commanding control works in these environments is a very difficult thing because you can't have every civilian ordering every military person what to do and there has to be a chain of command. How that actually gets worked out has not been carefully enough thought through and can really have an effect. We've had a good working experience with the Marine Corp. and one of the reasons we have with the sea berth unit is that we go out in the field. We try to a lot to together. DOD resents our asking just for sea berth. What people don't understand is that this working relationship between civilian and military personnel takes a lot of training and exercising together. It just doesn't happen.

Q. Are you familiar with our training site at the regional training sites (inaudible) that we have? We have a training site. Well, three of them, now. One at Fort Gordon, one at Fort McCoy, and one at Camp Parks, CA

A. We do exercise out of Fort Gordon. A big exercise in the Spring.

Q. We're planning one this year again.

A. Right. And we try to exercise and DMATs in that those exercises originally weren't, but I've leaned heavily on VA to make it something special and to really not exercise the deployment teams at the scene. That isn't what we need. What we need is to exercise this whole thing of patient movement, including setting up casualty clearing units, how to set up receipt points. What we really need in terms of criteria for transport of civilian or military personnel under care. What are the criteria for stabilization? What are the criteria for in flight care? What are the criteria for personnel in flight? How far - how much of the envelope can we push in terms of patient condition to get them evacuated? What are we going to do at the receipt point? DOD is responsible at the receipt point for the reception unit. All these kinds of things are really critical issues and that's the kind of stuff I'd like exercised at Fort Gordon. Not whether or not we can get a team to a site, run around and play and -

Q. I think that's part of what some of the guys on the ground want to do but they don't know the strategic issues. I think that they can do that while we work some of the more senior -

A. But the focus has got to be on the tactical issues - how do we make this thing work. Not the personal skills about getting a team to a primary care site because that isn't where a critical issue.

Q. I mentioned before that Dr. Hamre referred to the reserve as forward deployed forces and the Tiger Team Report said that the Reserve is going to have the major requirement for civil support. Now in the Reserve, in the Army, we're somewhere between 60 and 70% of the medical structure. Do you have any comments or thoughts about this? Have you worked much with the Reserve?

A. Well, it's hard to tell whether it's regular corp. or reserve officer. No one has a big AR on their forehead, so I don't know.

Q. Do you have anything else you would like captured in this interview?

A. If I think of anything, I will let you know.

Interview #8: Military Liaison to the Federal Emergency Management Agency
September 1999

Q. I'd like to start, as you know we're talking about the DoD role and barriers to use of DoD assets in domestic bio-terrorism. So my first question is do you believe that the Department of Defense has a role in response?

A. Unquestionably because there are so many expectations of DoD support and the trauma associated with the terrorist use of weapon of mass destruction. The trauma that is that makes it imperative that the Department of Defense do provide support to the lead federal agencies for crisis and consequence management. And part of my strong feelings is the expectation of the American public that is unique among the nations of the world, in that there is no fear or hesitation or trepidation on the part of the victims of the disaster when they see uniformed personnel and green trucks coming down main street America. What is really unique is the lack of fear and hesitancy about a professional force and we have a, a citizen force with a professional core that the American public expects to see come in and relieve the tension and traumas of catastrophic event. Not only that, uh, the Armed Forces of the United States can move big heavy things further and faster than anybody else in the world. We have the unique capabilities of operating in hazardous environments, contaminated environments. We have the trust and confidence of the people, and the trust and confidence of the inner agency community. Uh, in fact, the expectations in my opinion are so high nowadays, that they exceed the capabilities of the force, in order to be able to meet the primary mission of fighting and winning the nation's wars, conducting operations other than war. And quite fortunately, when we've had situations like Hurricane Lenny down in Puerto Rico, we haven't been involved in too

many big activities that spread the resources so thin that we can't meet the domestic mission.

It must always be understood that the domestic support mission, military support civil authority is a secondary mission, not a primary mission of the Department of Defense.

Q. Okay, good points. You mentioned the perception of the American public... that we should be there.

A. Correct. Uh, what would you say to some of the concerns for the siege mentality or military takeover that we should not be in the civil arena. In terms of posse comitatus that applies to unformed personnel under Title 10 U.S. Code, the active component or the Title 10 reserves assisting law enforcement or conducting law enforcement operations and the militia of the United States, which in the current century is the National Guard under the command and control of the governor. According to Article I, Section 8 of the Constitution, the federal military is exempt from posse comitatus. Even there, uniformly when conducting state active duty nations, the National Guard does not affect, arrest, nor incarcerate, American citizens. They are supporting law enforcement who are the sworn duly commissioned officers with the power of arrest.

Posse comitatus is quite frequently misunderstood, it was enacted, I believe in 1878 in the aftermath of the American Civil War when the union forces occupying the eleven succeeding states exceeded the bounds of propriety and the law in many cases subjugating American citizens. And it's quite properly still in place and still must be observed. I have enough experience in the field of military support civil authority to know that proper military support civil authority and even military assistance in civil

disturbance can be provided without violating possible posse comitatus either in the letter or the intent.

Q. You mentioned a number of strengths found in the military...they do a number of things that, that other agencies, and pieces of the government can't. Can you define for me the role you see for the military. How much, how fast?

A. We might be talking about transportation of uh, biological hazards and uh containers provided by uh public health service, either county, city, state or uh, the National, PHS. Uh, we might be talking about bringing in large quantities of pharmaceuticals. We might be talking about transporting de-contaminants. But it doesn't matter, when it comes to moving large quantities of items from manufacturers to major medical centers that are providing care for the major field hospitals that might have been set up in a more tactical environment.

Q. And that's what I wanted to get to. What you see as medical roles for hospitals?

A. If we have the FRP, the Federal Response Plan activated, then public health services leads the health support

Q. What is your perspective on the kinds of activities, the FRP will require of DoD; should we move hospitals, should we move just personnel for support, should we expect that we provide personnel medical support?

A. Ma'am, in the, the special events that I've done, I was involved in particularly consequence management planning for the last inauguration. We have a quarter of a million people out on the mall with a specified time and constitutionally mandated. There was a terrorist target of the highest order. One of the concerns that we dealt with was how to manage a medical emergency there for the eight major medical centers that serve the national capital region, the ALS BLS ambulances, the emergency room staffs.

There wasn't a clear answer on how the military could fall in with the constraints, restrictions and mis-perceptions, licensure for example. The licensure issues. We were never able to satisfactorily say exactly how we were going to do that. I was working with a Navy, 83 person rapid reaction force that the Navy maintains or maintained at that time. So part of my answer is, that needs to be clearly articulated and clearly stated and clearly trained so that both the civilian medical service industry, the major medical centers, and DoD medical system understands where the rules and boundaries are.

Q. Did you find lack of understanding on DoD's part, even the medical community in knowing what their role was?

A. I found at least two opinions to the question. There weren't clear answers to the questions, it was a lot of discussion, but their wasn't the yes we can do that under the following conditions and uh, being military, uh you understand like immediate response of the imminently serious conditions the commander makes. Then there are the three criteria, uh we don't have the same kind of clear statement for DoD medical.

Q. You mentioned immediate response. Some of the questions that have come up address how immediate is immediate. In a biological event they do understand the way things evolve. Hospitals are overwhelmed first so it's comes under consequence management guidance first, and then a crisis--because nobody recognizes that until we start dealing with consequences. If a reserve unit is two hours away, what is your FEMA perspective on whether a commander can order his troops to assist and respond.

A. Medically, assist?

Q. Yes.

A. No, you're 72 hours after the event, let's assume that there's isn't announced -- that they had e. coli or some variation of the enhanced uh--

Q. So this could be up to 5 days post event.

A. But the emergency that the commander could respond to would be the hospital that is overwhelmed with the walking alarm. And they have walking alarm, the people are swarming on the hospital and their commander, under imminently serious conditions to save lives and prevent human suffering, when there isn't time to notify the executive agent, who is the Secretary of the Army under executive agency, that he's doing this, may deploy troops and be defended in the eyes of the people who are in the after action review process, for having done that because, because uh we're in a situation where the medical facility drops off line

Q. You realize the medical facility is already off line because they're overwhelmed and people are dying because they can't even get into the emergency room. Then, what, - -

A. In that case, we're talking about a medical unit doing this?

Q. Yes.

A. What alternatives do they have? Would they set up their own facility and then control access to it and announce that they're there? Do they have the basic load of pharmaceuticals necessary to begin uh, uh immunization or counteract symptoms?

Q. That's part of my question. What, capability would a hospital asked for, we need people to help ventilate these patients. Give me some nurses. Can a medical unit send their nurses?

A. That is an interesting question because legally, based on my knowledge of the authorities, no. But if the county or city health director did make the request on behalf of the hospital, yes. There must be a request from civil authority before the commander can respond under immediate response authority. And a hospital, even a public hospital with a board of directors is not necessarily a civil authority because they're a non-

governmental entity. The public health director, the county commissioner, the sheriff could.

Q. My expectation is within hours we would have PSRC, sure.

A. The theatre of operation would be CONUS because this is the onset, of probably a precursor to war. A prelude to war.

Q. Is this war?

A. Depends on who dropped the bug and what the intent of the terrorists was.

Q. At what point does civil support, or a bio-terrorist event come on the world stage, become the war fight?

A. When the president says so and, if I'm not mistaken, to begin military operations pending the consent of Congress. That's the oversight part of checks and balances. In any event, we probably have a declaration of national emergency on the part of the President, while they're considering the military options against the world state, but the presidential declaration that gives the authority for greater military commitment.

Q. If we're focused on the war fight and our mission is to support the soldiers in war, then we would view the changing threat as no longer being a big boom on somebody else's territory, what do we call this and is this a change in DoD's roles and missions-- what is it?

A. It can't. Not a mission. It's a potential mission. The primary mission of the Department of Defense which is to fight and win the nation's war and 00TW. Military support civil authority is a secondary mission. We signed up to participate as a supporting agency under the Federal Response Plan. For example, but there is a caviat in there, that says when circumstances permit.

Q. I think that the next crossroads we were coming to was some of your frustration with trying to get DOD medical assets. First of all, can you tell me who the medical liaison or medical link is in DOD? Where do you go for direction? What is your contact

with DOD Heath Affairs - what is their responsibility to provide the link to medical support?

A. I don't know. Health Affairs, they're invisible to me. That doesn't mean they aren't active. But they just haven't surfaced. I work with PHS much, much more than I work with anybody in the Surgeon General's office or the labs or anybody like that. Maybe that's an oversight on my part, and maybe it's because they aren't actively engaged.

Q. *How do you view the military's role in domestic support in the conflict with maintaining the war fighting issue? We talked a little bit about that.*

A. Separate that into two questions for me. The military role in the domestic arena. The best military role in the domestic arena is the least military role in the domestic arena. We should not engage in domestic operations as though it is our right, our responsibility, and our mission. There are too many other nations on the surface of planet earth where the military has, with the best of motives - patriotic and service to the public - engaged in operations in the domestic arena with the military mind set and end up driving trucks against manicured lawns, bivouac in the wrong place, abuse of peoples' civil rights because the military is not trained to be sophisticated and delicate, especially in a participatory democracy like we ostensibly have here in the United States. Now, when I'm sitting here, it sounds like I'm teaching sophomore civics, but those dead guys that wrote the Constitution knew what they were afraid of when they were wanting to put constraints on the standing army - on the regulars. We need to, as current members of the military, always be sensitive to those principals and make sure the military is the resource of last resort. Is the last in - the first out. Does very, very little on private property or

with private citizens. Does it efficiently, effectively and then maintains the focus on the war fight which I believes leads in to your second question. And that was?

Q. The conflict with war fighting mission.

A. I think Gordon Sullivan, General Sullivan, Chief of Staff of the Army during the response to Hurricane Andrew, said something that has been lost in the fine print and that was, in his review of military participation force, particularly Army participation, in Florida and in Louisiana and then subsequently in Guam after Omar and Nicky in Hawaii, determined that and announced it, that the current Army's Table of Organization and Equipment and Training of the soldiers was quite adequate and capable of providing military support to civil authority. That there was no need nor justification for specifically equipped and trained units of the Army, dedicated to the domestic mission. The first time in my experience that we've stepped outside of General Sullivan's policies was the development of the Raid Teams. The Raid Teams coming out of the Army's Executive Agency to deal with a weapon of mass destruction and they have no war trace. I consider that to be an anomaly and exception to policy.

Q. When you talk about last in - first out, when you talk about biological warfare. When you talk about an overwhelming situation. If we describe a biological event and we look at the people who are exposed they are either going to get sick and die; get sick, be treated and die or get better; or not get sick at all. So, it's a relatively short duration, but it's critically important that the response be up front. If the request or the need from the Public Health Service as well as the communities at large, is for immediate support, where do you see - I know that the number right now is somewhere around 72 hours - to get any military support there and that would be very optimistic. Where would you say we should go in the future and do you see that clause for immediate response to a serious situation as something that, in a catastrophic, unusual event, not on a routine basis, that we should have operational plans that allow us to deploy early?

A. Catastrophic event affecting the entire nation would require a good plan that would avoid losing key assets because the Commander exercised immediate response

authority. What we're looking at, at the catastrophic level, is the absolute necessity, the imparity, that national level assets - meaning the Army of the United States with all of its nine components, in the pretty uniform components and the other services, judicially and efficiently deploy scarce resources and in the case of your question, medical resources, to where they can have the maximum supporting and supplemental effect on the implementation on the National Disaster Medical System (NDMS). If a field hospital, under the priority of that Commander, has been deployed to a hospital in the suburbs of Minneapolis-St. Paul, when, in fact, there is a major medical center that has not been affected yet, and can serve as the medical hub for an NDMS scenario to serve that whole metroplex, then the field hospital went to the wrong place. So the idea of having a well integrated, efficient, productive response from the military in support of the civilian medical community, requires a national level plan.

Q. Then we need a better link with DOD medical?

A. I'm talking about the link that DOD has with PHS, but it's personality based, it's not document based. We're just now engaging in the bio and it is so enormous and so horrible in its potentials that we're having trouble developing a new paradigm - I hate that word - a new manner of viewing the potential of a black death. The plagues of the middle ages.

Q. That really concludes the formal discussion of my doctoral work on identifying the barriers to the integration of DOD medical assets in domestic bioterrorism. I want to thank you for your participation.

A. Well, I'm honored and I mean that sincerely. I really hope we move forward to put a good working plan into place.

Interview #9: Department of Health and Human Services, Assistant to the Director, Office of Emergency Management

September 1999

Q. My first question to you is do you believe the DOD has a role in supporting the ESFA Public Health Service? If you believe they have a role, can you briefly describe that role?

A. A role in response to bio-terrorism? Yes, I do. I think that in our thinking we see several areas that we believe they have a role in, but I think that there are also several areas that we're sure they have a role in because we don't understand the complete make up and what they have to offer. First, based on prior experience with disasters, that's what my understanding is based on and expectations. We see a role in laboratory work. We see a role in threat analysis, particularly with the expertise from the USAMRID and other areas that would then dovetail with other laboratory expertise as a reference lab. We see a role in supporting personnel, both in terms of the logistics training for medical equipment and supplies, access to additional pharmaceuticals vaccines, depending on the scenario, and access to personnel that can assist in both near term (greater than 72 hours) into the weeks and months. We would see a role in supporting alternate care - the set up of mobile medical facilities. We would see a role in Guard activities in civilian sector, both in terms of distribution, perhaps, of pharmaceuticals and supplies, public information distribution, civil affairs issues, as well as potentially distribution of masks or other areas. We see them as a very large, potential asset, primarily in terms of personnel resources and also in terms of specialized areas. That's the way we would see it. Where I don't understand how deep they are would be how many MOS's are available for epidemiologists? What would be do to tap into the veterinary community? How

would we engage the preventive medicine community? How do we engage specialties? Infectious disease? How many infectious disease practitioners board certified do they have? I think that's where we are really lacking. What we are asked to do is to ask for requirements in a very blind way. Instead of wasting our time, if you will, asking for things that we may not receive.

Q. But you do have like a memorandum of agreement with people at USAMRID? To go directly to them?

A. We do that as part of the federal response plan - as part of the threat aspects.

Q. Who is your link to DOD?

A. We have multiple links to DOD. If we are to formally request assets, we have to go through the Executive Secretary of DOD and request those assets and then we usually get everything back ($), all subject to the economy act.

Q. So you're talking about through the SECDEF? So, if you do, and as I understand it....

A. That's in an open-ended environment. If it's a declared event, we would work through FEMA and through ESF8, we would go through Health Affairs.

Q. So what office is your major point of contact in Health Affairs?

A. It used to be Bushman and whoever Bushman's replacement is, that's who we generally went through to work requirements. They would work with DOMS and work the requirements. You could give requirements to DOMS and they would go to HA. There are a couple of different pathways. But we would, for all requests, they have to go through the Exec Sec. Then it hopefully gets filtered into the right groups. The groups we traditionally have worked with in formal and informal networks, would be Exec Sec

out of the Secretary of Defense, out of Health Affairs - DOMS, and SOLIC are the ones related to terrorism that we traditionally work with.

Q. How do you interface? Is there a medical rep in SOLIC or a medical rep in DOMS?

A. There used to be a medical planner in DOMS. Our requirements are worked through them and then they take care of it.

Q. I guess what I'm getting at is, usually organizational effectiveness dictates a relationship with somebody that has medical background.

A. Two things that we would work through, first...If it were a FEMA declared event, we would work through DoD's group at FEMA and that's Dutch Thomas. He's our medical rep, if you will, out of DOMS. He's the rep for ESF8. Everything goes through him to DOMS. We would then expect at some point, some communications out of Sue Bailey's shop (HA) with the Health Affairs person who has been assigned to us and traditionally that has been Bushman. We have a point of contact through the NDMS (National Disaster Medical System) within Health Affairs.

Q. When we talk about the role of DOD and when you need them, you kind of define how much or at least some of your questions about what's available, so you know how much to ask. How fast? Are there areas that if you need something, you'd expect or like to have them faster?

A. In bioterrorism, we see the rapid demands really related to the assessment of the threat. That would basically be assistance with case definition and final diagnosis. In those areas, what we seen is not so much support from epidemiologic assets, although it would be good to know, in a bioterrorist sense, we are aware of NAMRI and Walter Reed and USAMRID, those are the groups we traditionally have worked with. In a threat assessment situation, with working with the FBI we have worked and will continue to

work directly with those elements of the DEST that would be involved. That's generally Institute for Chemical Defense and RID. Not quite sure how the JTFCS is going to work in this. What we're looking for from the technical side probably would be laboratory confirmation, and some assistance with the threat information. Medical planning as we start to identify larger, bigger needs. How much and from where could we expect support. Is that clear?

Q. How do you feel the current configuration works? Are you getting what you need?

A. We haven't had to do it yet. So, from a threat assessment standpoint, we get very rapid response from USAMRIID and excellent laboratory support. For anthrax, the only reference lab - CDC doesn't have one yet - they provided and NAMRI provided state of the art rapid response and you can't rush biology. We're cognizant of that and that's been excellent. We don't have high expectations just because we know the lay of the land for rapid medical response. I think that we would expect 72 hours to start seeing people if we were to request them - maybe sooner. I'm personally wondering what the integration of information from the strategic level will be between RAID, the JTFCS, the DEST representation, and DOD. How will that be coordinated because right now there are too many response elements to have both state and federal parts. If JTFCS goes out with four assessment people individually in the field, where to they plug into? Do they plug into the JOQ? Do they plug into their own element? Who are they feeding back information to and that's where I see strategically the biggest confusion factor. There are a fair amount of capabilities that are being put out there, but there doesn't seem - although you could say the four star of the CINCs where JTFCS is going to control it -

they don't have any control over the RAID teams. They may, but it doesn't appear so...they are a state asset. The governor is going to be getting messages from multiple assets. We're very concerned about the coherence of those.

Q. What's your perception on what the public would expect from the DOD?

A. Everything! I think our public expects our military service people to win all the time - at a strategic level.

Q. What do you think they would expect if there were a bio terrorism event?

A. Whatever they need. Expertise, support, movement -

Q. Would they expect to see people in uniform handing them medication?

A. They could expect that. Whether or not that's a reasonable expectation is another issue. Every disaster movie or other thing that you see, they get thrust into it. I think that that's where public expectation is. Now the question is - is that an accurate representation? The question is should they?

Q. How do you think from your experience with the military in general, how do you think they view their role to support you?

A. I think they plan independently of us, and then if for multiple requests - in other words, their first job is to the CINC - whatever sync they're involved in. They plan to that and then they look at - well, how could we - depending on their level of vision - how could we help civilian authorities around our bases. Some components think nationally and domestically. I think right now it's mixed. You can't go from military facility to military facility, I think, and get a consistent picture of how they relate to civil authority. How San Antonio prepares for a bio terrorist event and how Bethesda Naval and how Walter Reed - I think there is inconsistency. There is no policy from CINC surgeons or

from joint staff on how they should prepare to assist the civil authorities and if there is policy, then there's no resources because we've talked to the Sync surgeons and they don't have it in their mission. They don't have money to do it. The bigger strategic question is how would TRICARE handle this? How would TRICARE handle a bio terrorist event? Where are they going to get the resources? Are they going to - is this covered? What are they doing for their dependents? What are their individual plans to handle large numbers of casualties? So planning for their own list of dependents as well as what the expectations outside that are critical from what I see. I really see that there is going to be a big disconnect. I don't think they understand their Delta, yet. I don't think they understand what their current populations are - that would seek treatment because they may not seek treatment from them all the time. They may not be enrolled in TRICARE, but all of a sudden when it's happening, all the dependants are starting to show up. Can they take care of them and the active duty personnel and then can they take care of anybody else?

Q. Hamre has said that the Reserves are the forward deployed forces across the United States to assist. Any thoughts, comments on that?

A. What's the plan for pulling them in? How fast? Not only does the public have a set of expectations, but if we're to be supported in the ESF8 then we need to know what are the reasonable request times - what's the reasonable lead time and who do you have and what specialties are they bringing. Have they ever operated as a unit before or are we going to deal with 100 individual consultants and have to be the organizing force or are we asking for an organized force? Finally, how many of the Reserve people have a

requirement for chem bio training? How many have been through USAMRIID course and know what they're doing?

Q. Can you postulate on your greatest frustration in trying to deal with DOD and the DOD response?

A. I think that there is an element of a can do without necessarily letting you know what's really under the sheets. I think there's that element of the Reserve force as a broad reserve - okay - you're going to take from one - you only have so many medical personnel and this country has not come to grips with the fact that there are only so many nurses and docs. If you're drawing Reserve forces from the community, you're taking medical people from the community. Who's going to make the decision that maybe for that community it's better not to draw the Reserves. In NDMS, we have a policy of not pulling the team from within 500 miles of the impact site. What's DOD's policy in terms of the deployment because if you're pulling people out of an area to treat those same people, it's a delay - it's frustration. What's the plan to pull in the Reserves?

Q. Do you have any comment on the military - our major missions to support the war fight, so our military medical folks are there to support our military as they fall. Do you have any comment on a conflict that -?

A. I think that it's pretty clear. DOD's mission is external - is against foreign enemies. I would question, except for the absolute need, the diminution of that ability to fight and support a fight or conflict or two conflicts overseas with taking from internal resources and applying them internally. I think the approach should be a civilian one for domestic approach with only as a last resort for DOD folks. That's opinion, that's a personal opinion.

Q. Well, a lot of this is personal.

A. But it's a personal opinion, that's not a positional one. I would add that I think the medical - the overall practice of medicine in this country is dysfunctional and to ask a decentralized, individualized dysfunctional entity to adapt to a centralized threat in a systematic way is an awful lot to ask from it so from a strategic standpoint, I think we have a long way to go. I look at 1918 pandemic - that makes a good example where physicians were confronted with not being able to treat folks because they died so fast.

Q. That's one of the speculations, is that if it occurs, the long-term, and I'm sure there will be some long-term, but they're either going to die or get better. Any other -

A. I think we could look to other DOD - I think we look to them for logistic support because they're very good at that and within that logistic support, we would also see turning in novel diseases - looking to them also for their production capacity. Whether it's vaccine production capacity or what have you. To try to look at that type of cohesive approach to something. When I was watching this pandemic film - people started mixing turpentine and honey together. The issue was and I hate this approach to things - well, we have to do something, even if it's wrong. Can you imagine drinking turpentine and honey with no known reason for doing it, but just so that you can feel like you're taking medicine.

Q. I thank you. You have added greatly to the body of knowledge for me and for my research paper. Those are the kind of issues that I'm trying to get to.