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# Triage for Civil Support

Using Military Medical Assets to Respond  
to Terrorist Attacks

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## Summary

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At the request of the Advanced Systems and Concepts Office (ASCO) of the Defense Threat Reduction Agency (DTRA), RAND conducted this research and analysis based on the likelihood that Department of Defense (DoD) medical assets would be called upon to provide support to civil authorities in the aftermath of a terrorist attack. Originally focused on chemical or biological attacks, it was expanded, following the attacks of September 11, to include any terrorist attack involving chemical, biological, radiological, nuclear, or conventional high explosives (CBRNE) weapons.

### Research Objectives

The three original research goals were to (1) identify DoD medical assets for response, (2) identify legal and other barriers to such a response, and (3) propose operational guidelines to facilitate civil-military cooperation. After September 11 and as a result of other efforts at various levels of government, the methodology of the research reported here was altered from its original design. Instead of cataloging DoD medical assets and postulating gaps in the civilian system, the research design took a more bottom-up approach, which was manifested in the substantial expansion of scenario-oriented exercises in which senior local, state, and federal officials were asked to participate. The following questions guided this research:

- Under what circumstances could military medical assets be requested?
- What sort of military assets or capabilities are likely to be requested?
- Are there appropriate military medical assets and related planning processes for civil support?
- What are the legal (and other) barriers to military support to civil authorities, and how can they be overcome, if necessary?

### Research Methods

RAND conducted reviews of relevant literature and other documents, including peer-reviewed literature, government reports, reports by nongovernmental agencies, and guidance and operational documents at the local, state, and federal levels. Additionally, a complete legal review was conducted to assess the current status of relevant statutory and regulatory authorities and restrictions, and to assess the current status of case law interpretation of those statutes and regulations.

RAND also conducted historical case studies that were focused on instances in which military medical assets were called on to assist civil authorities following natural disasters. Finally, two exercises—one for a smallpox attack in Georgia and one for a “dirty bomb” attack in California—were conducted. These exercises included senior officials from local, state, and federal agencies.

## Historical Case Studies of Military Medical Support to Civil Authorities

In Chapter Five, we examine DoD’s significant historical role in providing civil support, including medical support. We discuss several case studies of relief efforts by the DoD following three major U.S. natural disasters—Hurricane Andrew (1992), Hurricane Marilyn (1995), and Tropical Storm Allison (2001).

For Hurricane Andrew relief efforts, DoD initially responded by transporting several Disaster Medical Assistance Teams (DMATs) to provide emergency care to hundreds of patients. That support was expanded to include medical logistical support, specialty support care for animals, pest control, and water sampling. Despite generally positive reviews about the military’s support, there were complaints that the DoD’s reaction was too slow, that a decision to deploy an entire military hospital was ill advised, that the military did not deploy with medications needed by the civilian populace, and that coordination among military assets was less than satisfactory.

For Hurricane Marilyn, the military deployed electrical generator support, a field assessment team, and eventually deployed a combat support hospital (CSH). Nevertheless, due to glitches in the request for the CSH, it did not open until 15 days after the hurricane. For that and other reasons, it was closed one day after opening.

For Tropical Storm Allison, the military initially provided air transportation to Houston for several DMATs. A request for a 25-bed Air Force Expeditionary Medical Support (EMEDS) unit, initially rejected by the DoD Director of Military Support (allegedly on a technicality), was subsequently approved. The EMEDS unit deployed and became operational on June 14—one week after the storm initially hit—eventually providing care to more than 1,000 patients.

What lessons can be learned from these case studies? Even with the advance warning in the case of hurricanes, there were problems with civil-military coordination. Unpredictable attacks could further complicate matters. DoD should anticipate that certain requirements (e.g., transportation of people and goods, augmentation of the civilian infrastructure, veterinary and pest control support) will generally be required following natural disasters and CBRNE attacks. Moreover, DoD medical personnel can expect to be involved in relief efforts in the aftermath of a CBRNE incident—whether naturally occurring (e.g., a flu epidemic), accidental, or intentional. Nevertheless, a pattern of rapid deployment of DoD medical capabilities was not apparent from these case studies. The studies indicate that the current process of matching civil requirements with DoD capabilities is ineffective.

The case studies also raise several questions, including questions as fundamental as whether military capability should be deployed in lieu of additional civilian support and whether assets should be maintained in a centralized or decentralized fashion. Regarding the question of centralization versus decentralization of assets, the case studies indicated several principles that should be used in making the decision: the *speed* with which the asset needs to

be deployed, its *cost*, the *mobility* of the asset, and the *probability* that the asset will be used at the local level in noncrisis situations.

Although civilian capabilities in various disciplines have continued to improve since the September 11 attacks, it is reasonable to assume that DoD medical capability will often be required to supplement civilian medical capability. From that assumption, this report suggests several guidelines for identifying categories of assets to be used in planning for DoD medical support to civil authorities: *dual use* for combat support and civil support, *low probability of use* by civil authorities, and *not required for immediate use*.

## Exercise-Based Studies of Military Medical Support to Civil Authorities

As part of the research for this report, RAND designed and conducted two exercise-based studies of potential military medical support to civil authorities in the event of a large-scale terrorist attack. One study was of a smallpox attack in Georgia and the other was of a multi-faceted radioactive “dirty bomb” attack in California, each of which brought together senior government emergency response officials, policy advisors, and practitioners at the local, state, and federal level.

The exercises were designed to assess the feasibility and capability of U.S. DoD medical resources providing civil support for large-scale terrorist attacks; address the need for specific operational templates that could be used by military and civilian response entities to plan for, and respond to, such contingencies; identify potential actions at the federal and state level that could, if taken in advance of such contingencies, result in more effective civil-military coordination; and identify and address other related local, state, or regional issues. In each exercise, the RAND process known as “The Day After . . .” methodology was used. To address political and operational sensitivities, the Day After . . . methodology, through a series of steps, takes participants into the future, presents them with decisionmaking challenges, and then brings them back to the present to address potential solutions to problems identified in the “future.”

For each exercise, a set of issues, identified by representatives of a wide spectrum of state and federal organizations during the exercise’s design phase, were identified as the subjects of the scenarios. The issues generally fell into the following categories: information sharing; operational (including alert and warning and command and control); DoD-specific (employment considerations and capabilities); and legal and other barriers.

### The Georgia Exercise: Smallpox Attack Scenario

The smallpox attack scenario was carefully chosen following extensive discussions with Georgia state and local officials. For each exercise step, in addition to addressing the general set of issues noted above, members of the design team developed additional specific issues to be addressed, not only to inform the state-to-federal support request process but also to test Georgia’s systems and procedures for responding to such an attack. Specific federal-level issues included additional access to classified threat information for Georgia officials, federal-state planning and coordination, and deployment of the National Pharmaceutical Stockpile (now called the Strategic National Stockpile).

Additional state-level issues included those related to quarantine/isolation activities; the employment of area or regional medical assets; the effectiveness of health information

systems; mandatory vaccinations; the processes for requesting federal assets; rules of engagement; liability of local, state, and federal personnel; and public information plans.

The Georgia exercise informed many of the issues and produced additional observations about a response that could include federal assets. Currently, there is no satisfactory process at the state level for identifying requirements, which could be used to help inform requests for federal support. The exercise also exposed a number of legal issues, most notably in the liability area, related to licensure, vaccinations, and standards of care, and the legal and practical considerations of quarantine and isolation. The lack of a comprehensive threat assessment with specifics on targets, capabilities, and tactics was an issue throughout the exercise. Command and control—who is in charge of what and when—had not been satisfactorily resolved. Exercise participants identified problems and potential solutions related to inter-jurisdictional communications. And, finally, participants identified significant weaknesses in intergovernmental planning and preparedness.

### **The California Exercise: Radiological Dispersion Device Attack Scenario**

The “dirty bomb” attack scenario for California, like the Georgia scenario, was selected only after close consultation with state officials. California sought not only to address the specific objectives of the research but also to test their own systems and procedures for responding to such an attack. As in Georgia, California officials developed additional issues to be addressed in the exercise. State-level issues were related to the question of when to raise threat levels and when to notify health officials of an increased threat, public affairs matters, the evacuation of hospitals, advice to medical facilities in the “danger zone,” and the distribution of prophylaxes and antidotes. Federal issues were related to greater access to classified information; alert levels; prepositioning of assets; evacuation assistance; detection, assessment, and decontamination support; and cost reimbursement.

As with the Georgia exercise, the California exercise informed many of the issues and produced additional observations about a response that could include federal assets. The exercise highlighted problems related to alert and warning, attack assessment, and monitoring for a radiological attack. It also emphasized issues pertaining to the response to a radiological warning within government and among the public in general, and in the health community in particular. Exercise participants were acutely aware of problems associated with evacuation, both of the general public and of medical patients, whether directed or spontaneous. Participants highlighted needed improvements in risk communications as a major shortcoming. Processes for requesting external assistance were observed to be inadequate. And finally, the issue of burden sharing among various jurisdictions was highlighted.

### **Implications from the Exercises for the Use of DoD Medical Assets**

Although the exercises were designed to be at a scale that would require state officials to seek outside help, participants generally avoided requesting federal support, including support from DoD. Why did the states not request such support? Perhaps because the medical demands created by such attacks had not been carefully considered or could not be anticipated. When federal participants asked state and local participants what they needed, they tended to answer with another question: What do you have?

The lack of a comprehensive, national requirements-identification process hampers planning within DoD to provide effective civil support, including medical capabilities. Lack of knowledge about DoD authority, capabilities, asset availability, and other restrictions also

contributes to the problem. In addition, there are political implications in requesting or not requesting federal support—particularly support from the military.

## Conclusions

We sought to answer a number of questions in this research. Those questions follow, along with our recommendations and conclusions in response to those questions.

### Under what circumstances could military medical assets be requested?

There is reluctance among state and local authorities to request federal assistance, especially military support. The reasons for that reluctance are both operational—e.g., the lack of a process to identify medical demands during a crisis situation—and political. General criteria for predicting when requests could be made for federal medical assistance, including requests to DoD, apply when the civilian medical system has the following characteristics:

- Destruction or significant degradation of infrastructure
- Depletion of critical civilian medical personnel
- Anticipation of prolonged effects caused by morbidity (e.g., as in the case of smallpox) or the situation (sustained effects on personnel and infrastructure due to destruction, contamination, etc.)
- Shortage of critical, unique capabilities (e.g., decontamination, evacuation, medical specialties).

### What sort of military assets or capabilities are likely to be requested?

DoD has provided valuable assistance to civil authorities in the past and can expect requests for assistance in the future. Preferably, requests for assistance will be based on requirements, rather than being requests for specific assets. Our research suggests that until the processes for determining and communicating requirements is improved, this ideal situation is unlikely. Therefore, it is difficult to predict with any precision what types of medical capabilities may be requested from the DoD.

Two observations in particular should be mentioned: military “units” may not always provide the most effective or efficient response, and medical response often involves more than just casualty care. DoD possesses unique capabilities, including detection and decontamination of agents, treatment and evacuation of contaminated casualties, and preventive medicine capabilities, which may be useful in responding to domestic terrorist attacks or other crises. In short, DoD assets that are of value to civil authorities have fallen into two general categories: *more support* and *different kinds of support*.

Criteria for guiding future civil support planning fall into two groups. The first group of criteria consists of principles for determining which assets or capabilities should be centrally controlled or locally controlled. Those principles include the following:

- The *speed* with which the asset needs to be deployed
- The *cost* of the asset
- The *mobility* of the asset
- The probability that the asset will be used at the local level in a noncrisis situation.

The second group of criteria consists of guidelines for determining the prudence of providing a particular military support capability. These guidelines include:

- Whether or not the asset is “dual-use” between military and civilian settings
- Whether or not the asset has a low probability of use in civilian settings
- Whether or not the asset would be required immediately in a crisis.

### **Are there appropriate military medical assets and related planning processes for civil support?**

DoD’s joint planning process is optimally designed for the deliberate planning of combat campaigns, not civil support. DoD is wholly responsible for planning wartime missions, but DoD does not control the planning for a national response to a domestic incident.

Planning for military support to civil authorities (MSCA) is hindered mostly by the absence of a robust process by which the states and localities can articulate their potential requirements, even broadly. Requests from states and localities for assistance have historically been reactive in nature. As a result, DoD’s ability to prepare for effective and efficient MSCA missions is limited.

No “Title 10” (active duty or Federal Reserve component) units have been assigned a mission responsibility for MSCA, and requests for assistance likely will continue to be fulfilled on an ad hoc basis. These factors are all complicated by the lack of a comprehensive training program for Title 10 and Title 32 (National Guard) units for providing civil support.

### **What are the legal (and other) barriers to military assistance to civil authorities, and how can they be overcome, if necessary?**

There is ample authority for the use of the military domestically, including the provision of military medical support to states and localities in the event of a terrorist attack, and there are sufficient safeguards in place to prevent any abuse of discretion in the employment of military assets. No major new authority is necessary. Nevertheless, there is some cause for concern about potential liability of DoD and individual service members for negligence on the part of decisionmakers or military personnel in the conduct of civil support activities. Non-legal barriers also constrain effective military support, including confusion inside the military and in civilian jurisdictions regarding the authority, capabilities, and appropriate role of the military more broadly; cultural barriers between the military and civilian entities; and the lack of a comprehensive pre-event requirements-identification process in support of the national strategy.

## **Recommendations**

### **A process for accurately determining requirements for military support to civil authorities must be established if DoD is to plan and participate in response activities more effectively.**

DoD will likely be requested, as part of an overall federal response, to provide medical assistance to civil authorities in the future. A comprehensive requirements process is for the most part nonexistent. DoD should work closely with the U.S. Department of Homeland Security (DHS) to encourage and participate in the establishment and exercise of such a process. Co-

ordination with states and localities in this process should be led by DHS. A collaborative process based on common terminology and clear guidelines for determining requirements and available capabilities is clearly indicated.

**Military medical force structure should not be reduced further pending a comprehensive assessment of domestic military mission requirements.**

Although a comprehensive requirements-identification process will necessarily have to precede an assessment, DoD can certainly anticipate that certain medical support requirements will almost always exist and can take those requirements into consideration in the near term. A planning process that identifies anticipated MSCA medical requirements could result in the identification of existing medical capabilities.

**More comprehensive DoD guidance, doctrine, and training will be needed to include support missions as the missions are identified.**

Little definitive guidance has been given to DoD or promulgated within DoD for military support to civil authorities. Further guidance is now required to provide the impetus for planning and developing the doctrine, structure, and training required for such support. To avoid confusion, current directives for military support to civil authorities should be combined and republished following the issuance of definitive guidance. We further recommend that the resulting document be made widely available to civilian authorities.