A NATIONAL SYSTEM FOR MEETING EMERGENCIES

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A new system for handling medical emergencies anywhere in the United States, called the National Disaster Medical System (NDMS), will be activated when the President declares a major disaster, when a national security emergency is declared, or when a state requests large-scale medical assistance, as in a major peacetime nuclear power plant disaster.

BACKGROUND

The NDMS was conceived in 1980 by medical planners representing the U.S. Department of Health and Human Services, the U.S. Department of Defense, the Veterans Administration (VA), and the Federal Emergency Management Agency. The federal government had many plans to cover such disasters as tornadoes, fires, earthquakes, nuclear reactor disasters, and mudslides, but none of the plans were adequate for responding to the medical needs of victims and the surrounding community.

The Department of Defense (DoD) had begun to implement a plan called the Civilian-Military Contingency Hospital System for care of military casualties returned to the U.S. from a conventional conflict overseas. This plan added voluntarily precommitted beds in civilian hospitals to the VA hospital system to handle a large and sudden influx of wounded servicemen. The new NDMS system would be based on this existing system.

In late 1981, President Reagan also established the Emergency Mobilization Preparedness Board and several principal working groups including one on health. The President directed the Board and the working groups to develop policies and programs to improve responses to major disasters and emergencies using existing resources as much as possible. A key achievement of the Board and working groups was the further development of the NDMS concept and system design.

The plans for the NDMS were made public in June, 1984. The System has a twofold purpose: (1) to supplement state and local medical resources in responding to a major peacetime disaster; and (2) to provide backup medical support to the military during a national security emergency. The NDMS is not intended to replace or supplant existing plans or resources at the local, state, or regional levels. Rather, it supplements those resources when they have been overwhelmed.

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MEDICAL RESPONSE

The NDMS has three key aspects. The first is to provide medical care at the disaster site. Search and rescue remain the responsibility of local officials. In a major disaster, victims will be taken from their place of rescue to a nearby casualty clearing point (casualty collection point). This might be a school gymnasium, armory, stadium, or airport hanger. At these locations, victims can be sorted (triaged) as to treatment priority, stabilized (fractures splinted, major bleeding controlled), and cared for until transportation can be provided to a site where definitive care is available.

The NDMS will provide personnel at these casualty clearing points to perform these tasks. Personnel will be organized into "clearing-staging units" (CSUs), which could have as many as 100 members or as few as 15. With a full complement of about 100 persons, each CSU could hold and care for 240 patients.

The concept of the casualty clearing staging unit was first tested by the Public Health Service in 1984, when two prototype units were organized from Commissioned Corps and civil service volunteers. These units participated in several field exercises in Washington, D.C. and Los Angeles. The tests were judged to be quite successful. We hope to have 150 casualty clearing units around the country. Most units will be organized from nonfederal government volunteers, including physicians, nurses, paramedics, emergency medical technicians, and pharmacists. Ultimately, the units will provide basic care of persons with multiple traumatic injuries or illnesses after exposure to radiological, chemical, or biological agents. These units will be supplemented by smaller teams with special expertise who will advise on specific treatment of such exposures. When responding to a major disaster, members of the CSUs will be appointed as temporary federal employees, thus eliminating possible licensure and certification issues and providing the protection of the Federal Tort Claims Act against personal liability.

Mobile surgical units also will be available to provide immediate medical care. We hope to have at least 15 of these units organized and in a state of readiness. Current design calls for each unit to have 215 members, a 60-bed intensive care unit, and whatever else might be needed to perform as many as 36 major surgical procedures in a 24-hour period. The purpose of the mobile surgical unit would be to stablize patients with life-threatening conditions surgically, so they can survive evacuation to a hospital. The members of these units would also be appointed to federal status upon activation and deployment.

PATIENT EVACUATION

The second element in the NDMS is patient evacuation. The Department of Defense has several aircraft that could be part of a

NDMS response to a major national disaster. The C-9 "Nightingale" carries a medical crew of two nurses and three technicians and as many as 40 litter patients, or various combinations of litter and ambulatory patients. The C-141 cargo aircraft, which is used for medical evacuations from overseas locations, can carry nearly 100 litter patients. The C-130 cargo aircraft can take off and land using unimproved runways and can carry approximately 70 litter patients.

The Department of Defense is also pursuing the use of commercial passenger aircraft for aeromedical evacuation as part of the Civil Reserve Air Fleet (CRAF) program. Plans are under way to include the Boeing 767 and McDonnell-Douglas MD-80 aircraft for evacuating those injured. The NDMS is also looking at other modes of transportation, including AMTRAK passenger coaches and school buses, for patient evacuation.

DEFINITIVE HOSPITAL CARE

In a disaster, it may be necessary to evacuate many patients over long distances to provide definitive hospital care. The vast majority of our nation's acute care hospital beds are located in major metropolitan areas. Hence the NDMS is concentrating efforts on obtaining the voluntary commitment of beds in the 71 largest metropolitan areas, which have 726,000 beds. The goal of the NDMS is to have a minimum of 100,000 nonfederal beds committed for use in major disasters and emergencies. As of today, over 80,000 beds have been enrolled in the System.

BENEFITS OF PARTICIPATION

A community that becomes part of the NDMS will reap the following benefits: (1) Participating hospital staffs will receive training for which they can receive educational credits. (2) Through periodic exercises that are required by the Joint Commission on Accreditation of Hospitals (JCAH) for accreditation, the hospitals can be better prepared to respond to local emergencies or disasters. (3) A financing system will provide for prompt reimbursement of charges for services rendered by participating hospitals, physicians, and staffs during actual emergencies. (4) Clearing staging units organized as part of the NDMS will be ready for use during local emergencies that do not require national resources. (5) Interregional networking of hospitals, fire and rescue services, emergency medical authorities, and other key groups will enhance response to local emergencies. (6) The participating organization will have the knowledge that its members voluntarily are contributing their life-saving services to their community, their state and region, and their nation to mitigate the effects of major disasters and emergencies.

I hope that this review of the National Disaster Medical System is helpful. The nation does have a national approach to disasters, including nonmilitary nuclear emergencies.