

Public Health Response Actions and the Use of Emergency Operations Centers

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Abbreviations:

EOC = emergency operations center
ESF = Emergency Support Function
FRP = (US) Federal Response Plan
ICS = incident command system
UCS = unified command system

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Abstract

In the wake of 11 September 2001, many public health agencies are reassessing their institutional capabilities and procedures to respond to mass-casualty incidents involving weapons of mass destruction. Prior to the fall of 2001, planning by the public health and other sectors addressed more conventional or naturally occurring events such as earthquakes, hurricanes, tornados, and chemical spills, although attacks with weapons of mass destruction were a growing concern. While the nature of natural versus intentional events differs, the management and coordination of response activities to them follows the same incident command system.

A major lesson learned during the response operations to the 11 September 2001 attacks in New York City was the value of disaster planning, conducting exercises, and developing relationships among the various response agencies. Although New York City's physical Emergency Operations Center (EOC) at 7 World Trade Center was destroyed in the attack, the medical and health response community was able to react effectively to the possibility of mass casualties as well as to the more usual needs. This was enabled by the pre-existing relationships that had been developed between city, state, federal, and non-governmental agencies while planning and exercising for such events and their aftermaths.

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Introduction

An Emergency Operations Center (EOC) is a location from which personnel representing various organizations, both public and private sector, come together during an emergency or event to: (1) coordinate response and recovery actions; (2) conduct strategic decision-making; and (3) manage resource allocation. It can be described best by comparing it to a military command post, complete with personnel, communications systems, and security. The EOC is not the forward command post such as exists at the scene of an incident, but rather a pre-designated operational center in which coordination and management decisions for running

the response operations are facilitated. It becomes the center of information regarding the overall actions for the response to, and control of, the incident. From it, emergency management personnel may conduct operations during natural disasters, man-made incidents, or attacks.

During and following a catastrophic event, the first line of the coordinated response operation is conducted by and originates at the local level. In any emergency, the State and Federal governments will provide major support when the damage has been widespread, severe, and overtaxes the local resources needed to adequately address the situation. On-site

response actions to any event will be expected to be undertaken primarily by local resources for the first day or more. Even in major metropolitan areas, Federal response assets likely will not be on the ground and fully engaged for the first 24-hour period after the event. Once these resources arrive, the local incident commanders will form the connection between the emergency management, law enforcement, fire services, emergency medical services, public health agencies, and the follow-on state and federal response team resources.

Background

One of the basic functions of government is to protect the lives and property of its citizens. As a matter of normal day-to-day operation, this function is performed in an efficient and effective manner by many different agencies on a regular basis. In most local communities the public safety, health, welfare, other departments, and non-governmental agencies (i.e., Red Cross) have specific routine duties and responsibilities.

In an emergency or catastrophic event, these organizations must share their resources and work together to mitigate the consequences of the event on the community. A coordinated, cooperative response to an emergency does not just occur; it requires planning, response, mitigation, and recovery actions be developed before an event and modified accordingly during actual operations.

In order to establish a standardized system for providing coordinated assistance to local and state governments during disasters, the [US]Federal Response Plan (FRP) was developed as per Public Law 93-288, commonly referred to as the Robert T. Stafford Disaster Relief and Emergency Assistance Act (as amended), or simply the Stafford Act.¹ The Stafford Act provides the authority for the Federal government to respond to disasters and emergencies in order to save lives and to protect public health, safety, and property. Under the Stafford Act, the President is authorized to: (1) establish a program of disaster preparedness that uses the services of all appropriate agencies; (2) provide grants to states at their request, for development of plans and programs for disaster preparedness and prevention; and (3) ensure that all appropriate Federal agencies issue warnings of disasters to State and local officials.

The FRP facilitates the delivery of all types of Federal response assistance to states and territories of the United States to help them deal with the consequences of significant disasters. The plan outlines the planning assumptions, policies, concept of operations, organizational structures, and specific assignments of responsibilities to the 27 Federal departments and agencies in providing response assistance to supplement the local, state, and territorial response efforts. The FRP consists of a Basic Plan, Emergency Support Function (ESF) Annexes, Recovery Function Annex, Support Annexes, Incident Annexes, Appendices, and Figures. The 12 ESF Annexes provide guidelines for Federal support of emergency needs. The annexes include Federal scope and policy, description of the emergency situation and its implications, a concept of operations, roles and responsibilities of lead and support agencies, and a glossary of applicable terms.

When a potentially catastrophic event occurs, the majority of response actions are dealt with by the local and state governments. When these resources or capabilities are exceeded, the Federal government is requested to provide additional resources to augment those already being utilized in the impacted region.

Local government emergency response and management agencies will respond to the event and make the appropriate notifications to State authorities. Command and control functions for the incident will be undertaken by the local authorities. The Incident Command System (ICS) that is established during the first response actions most often will transfer into a Unified Command System (UCS) as local mutual aid reserves, State, and Federal resources begin to arrive and engage in operations. The UCS concept means that all agencies that have a jurisdictional responsibility at a multi-jurisdictional incident, contribute to the process of decision-making and maximizing the use of joint resources.

This is the point in the management of an incident where the EOC becomes a very valuable asset. The EOC supports the Incident Commander or the UCS with managing the response activities, allowing for the orderly, coordinated integration of local, State, and Federal resources to protect lives, property, and maintaining the health and safety of residents and responders. The over-riding goal is to use and implement a variety of resources, techniques, and skills to reduce the probability and impact of severe events and to bring restoration of basic services to the community as quickly as possible.

Discussion

The use of an Emergency Operations Center as described above, facilitates the efficient management of an emergency situation. The inclusion of the public health and medical community in this operational matrix greatly enhances the integration and coordination of these systems into the overall disaster response operation. Following a large-scale event, particularly an event that presents with little or no advanced warning, emergency management officials need a place where all stakeholders can interact to make decisions and set priorities using the latest, most accurate information on needs and available resources. The EOC provides the place for coordination amongst agencies and non-governmental agencies at all levels, and includes the key role played by the public health and medical sectors.²

Under the FRP, the health and medical responsibilities are delineated under ESF #8. Many states have adopted the same support function structure so as to more easily unite with the federal plan, but all have public health and medical responsibilities defined in their plan and represented at their local and state EOCs. A unified public health and medical branch can be established within this structure, and representatives from local, state, and federal agencies all should have representation in the EOC. The emergence of bioterrorism as a threat to the United States has further accelerated the integration of public health and medical components into the emergency management field.

The key to success during operations is the early coordination among law enforcement, emergency management,

public health, and medical officials. Planning and conducting joint exercises are effective in the preparation of a strong unified command structure. The use of a Joint Information Center at the EOC as soon as an activation occurs can assist greatly in the organized dissemination of information in order to help alleviate misinformation, and prevent panic, additional injuries, and deaths from occurring.

Conclusion

Public health and medical planning needs to occur at the local level, but as the planning process evolves, it is necessary to integrate planning activities with County, State, and Federal efforts. The use of ICS, UCS, and the EOC facilitate this process.

By definition a "system" is a set of inter-related parts working together to achieve a common goal. The goal of the emergency management system is to reduce the loss of life, property, and damage through the close coordination and teamwork of individuals, organizations, and resources. Incident management, patient tracking, health surveillance, information management and restoration of services are common functions that are addressable through the use of a common and consistent system.³

Public health departments are the backbone of the United States' public health system, but if they work alone they cannot be effective. In order to be successful in non-emergency and especially emergency situations, they must build and maintain working relationships outside of the classic public health arena.⁴ These associations should include law enforcement, fire, emergency medical services, emergency management, environmental protection departments, and the medical community. Successful collaboration and coordination between these entities during any emergency situation is critical to a successful reduction in morbidity and mortality.

A major lesson learned during the response operations to the 11 September 2001 attacks in New York City was the value of planning, conducting exercises, and developing relationships among the various response agencies. Although New York City's physical EOC at 7 World Trade Center was destroyed in the attack, actions to react to possible mass casualties were taken as well as other public health and medical coordination activities. This was enabled due to the pre-existing relationships that had been developed between city, state, federal, and non-governmental agencies while planning and exercising for response.

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