

## **EDITORIAL: DELIVERY OF EMERGENCY MEDICAL SERVICES IN DISASTERS**

All of the articles in this issue focus on the delivery of emergency medical services (EMS) in large-scale mass casualty-producing situations such as are produced by natural or technological disasters. A major reason for devoting an entire issue to this subject matter is that nowhere does there exist a single collection of writings which are concerned exclusively and in a generic way with the problem of EMS delivery in disasters. Most of the existing published work on EMS disaster planning and response consists either of single descriptive case studies or of writings concerned with specific medical or administrative problems faced by hospitals and other EMS deliverers in attempting to respond to disasters.

Although all the articles in this issue have the same substantive focus, the authors apply a range of different perspectives to the analysis of the topic. The issue begins with a paper by Holloway, the former director of EMS for New York City. Holloway presents a very realistic and insightful picture of EMS operations and planning, based on his own actual involvements in coordinating real-life mass casualty events, a perspective which is important but limited, nevertheless, because it is derived from the author's experience with only one community, and a unique one at that. The issue ends with an article by Gibson, a major figure in EMS research, which expresses a viewpoint almost directly opposite that of Holloway's. The need for applying rigorous research methods and systematic theoretical analyses to the problem of EMS delivery in disasters is the message of this paper, a point

which will undoubtedly be well taken by most EMS researchers. However, Gibson is more interested in the development of a scholarly and scientific theoretical base for the EMS field than he is in considering the kinds of practical questions EMS practitioners such as Holloway must address on an everyday basis.

The perspective represented in the articles written by staff members of the Ohio State University Disaster Research Center (DRC) falls somewhere in between these other two extremes – that is, between the practical questions of the experienced EMS deliverer and the theoretical issues of the EMS researcher. Each presents the results of comparative research on specific substantive problems or questions in the delivery of disaster EMS. Although these authors employ a social science perspective in analyzing EMS delivery in disasters, the articles are written more for EMS planning and operational personnel than for other social science researchers.

In order that the various topical papers be more meaningful, Dynes, the co-principle investigator of the Health Resources Administration sponsored research, offers a background introduction on the two-year comparative study which DRC has been conducting of the delivery of EMS in disaster and other large-scale mass casualty-producing situations. Tierney and Taylor's article follows, and is essentially a summary of many of the Center's substantive findings at the end of its first year of study. Perhaps one of the most important findings they present is that, contrary to the belief held by many EMS planners and operational personnel, EMS delivery in disasters is

not simply more of the same thing as EMS delivery in everyday situations. Rather, EMS delivery is qualitatively, as well as quantitatively, different from everyday EMS and, thus, requires different kinds of organizational responses and pre-planning.

The paper by Worth and Stroup analyzes in what ways that passage of federal EMS legislation has had an impact on the operation of EMS delivery in large-scale medical emergencies. They compare EMS care in nine mass casualty events which occurred prior to the establishment of federally funded EMS systems with EMS care in eleven mass casualty events which occurred after the establishment of the EMS systems. They presented some surprises, not the least of which is the finding that many of the problems EMS deliverers are presently experiencing are the same problems which existed prior to the establishment of the federal guidelines.

Golec and Gurney address perhaps one of the most important components of the delivery of EMS disaster situations – needs assessment. Using data from 18 disasters, they analyze the extent to which an initial on-site needs assessment did or did not occur, and they then go on to describe the typical consequences for hospitals when an adequate needs assessment was not undertaken. Finally, they examine the factors which account for why, in most disasters, an adequate on-site needs assessment does not take place.

The article by Neff takes a step forward in advancing our understanding of how socio-political factors – specifically community and

jurisdictional boundaries – influence EMS delivery in disasters. She systematically documents the not too surprising finding that no matter how advanced the technology or how abundant the resources, an EMS system's effectiveness in responding to disasters is intimately linked to very basic social processes like conflict, cooperation and competition.

Wright's paper represents a style and model toward which disaster research is striving. His analysis arrives at a theoretical model depicting the principle factors which account for whether casualty handling organizations exhibit a centralized or independent response pattern in mass casualty events. He then goes on to assess the effect which centralized or independent response patterns have on effective service delivery.

Whatever the limitations of the different perspectives indicated by the articles in this issue – and each perspective is but only a partial view of the reality of EMS delivery in disasters – all of the authors in this issue demonstrate that much has been learned and that there is yet more to be learned about the handling of medical emergencies in large-scale crisis situations. The work of the researchers found in this issue is also representative of that of a whole new generation of scholars who are applying their basic social science skills to the analysis of the question of how groups and organizations respond to natural disasters and other collective stress situations.

VERTA TAYLOR  
*Disaster Research Center  
 The Ohio State University*