Foundation, Grant No. CEE-8103698.	made available by the National Science The findings and opinions reported here necessarily reflect the views of NSF.

#### SUMMARY

"The only thing that I can think of that comes close to what that hurricane felt like was Vietnam. Wait a minute. I take that back. Not even Vietnam comes close."

Mobile, Alabama, Hurricane Victim

This report is intended to contribute to the growing body of information and data concerning natural disasters. Perhaps more importantly, it represents the first attempt to analyze the impact and potential of the black media in reporting and responding to such phenomena. It traces and interprets the sequence followed by black media operators in Mobile, Alabama, in gathering, selecting, and disseminating information about preand postdisaster activities. The report reviews the capability of the black media to reach large sections of the black community, assesses the ability of the black media to influence community actions to ensure safety, and describes the current and potential ability of both local and national black media to educate black communities concerning disaster mitigation, relief, and recovery programs.

Following a general review of related literature, the family survey is described. Questions asked of representatives from the media and from programs such as the Mobile County Civil Defense Headquarters, and a qualitative analysis of the responses, are presented next. The coverage of hurricanes by the local newspapers ten years before and two years after Hurricane Frederic are examined next. The final section reviews the findings of the study, presents the major conclusions drawn, and makes recommendations concerning use of the findings.

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Charles H. Beady, Jr. Baltimore, Maryland

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#### PREFACE

This paper is one in a series on research in progress in the field of human adjustments to natural hazards. It is intended that these papers be used as working documents by those directly involved in hazard research, and as information papers by the larger circle of interested persons. The series was started with funds from the National Science Foundation to the University of Colorado and Clark University, but it is now on a self-supporting basis. Authorship of the papers is not necessarily confined to those working at these institutions.

Further information about the research program is available from the following:

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#### INTRODUCTION

A recent publication by the National Academy of Sciences, Disasters and the Mass Media (1980), concluded that television, radio, and newspapers can influence attitudes and behaviors of individuals and organizations regarding natural hazards, disaster relief, and recovery. However, the study points to a lack of adequate systematic research on the specific roles of the media in disaster reporting and on human responses to information on natural disasters within minority communities. Specifically, no research has been conducted to address the influences of black-owned or black-managed media on disaster preparedness and response in black communities. Lindell, Perry and Greene (1980) found a death rate of 38 per 1,000 for blacks after Hurricane Audrey struck Louisiana in 1957. noted that, in the aftermath of a tornado in Waco, Texas (1953), 4% of white families reported one member seriously injured, compared to 12% of black families. This study interpreted these findings as indicating that minority groups tend to suffer disproportionately negative consequences in natural disasters.

Because of these and other similar findings, the Institute for Urban Research at Morgan State University saw a need for an exploratory examination of 1) the role and potential role of black-owned, black-operated, and black-oriented media in transmitting information on hazard mitigation, disaster preparedness, and recovery processes in predominantly black communities; and 2) the responses of black community members to those transmitted messages. With funds from the National Science Foundation, the Institute identified a recent disaster site, Mobile, Alabama, which was devastated by Hurricane Frederic on September 12, 1979. This site was suited to the purpose of the study because one-fifth of the homes in the

city were damaged, blacks comprise more than 30% of Mobile's population of nearly 400,000, and the city has several black-oriented information media, including two newspapers and two black-owned and/or black-managed radio stations.

It was anticipated that this study would provide some important preliminary information on black mass media in black communities for policy makers concerned with disaster preparedness, warning systems, impact response, and recovery programs. Additionally, we hoped the study would have relevance for black communities elsewhere, and for media reporting of other natural disasters such as tornadoes, blizzards, floods and earthquakes. The data may also have utility for technological disasters, specifically those associated with nuclear power plants, many of which are located near large urban populations.

# Theoretical Perspective

The research that does exist on media and disasters has tended to focus on the preimpact phase, particularly on warnings (Mileti, Drabek and Haas, 1975; Carter and Clark, 1977), on the media's impact, and on long-term social responses to hazards and disasters. However, one study has shown that when perception of personal risk is high, individuals are more likely to undertake some adaptive behavior in response to hazard warnings, and that perception of personal risk is generally based on amount, type and credibility of information transmitted by the mass media (Lindell, Perry and Greene, 1980).

Studies on the behavior of blacks during disasters have been limited to one of questionable value, done in 1938, on the adaptability of black families in emergency shelters, and to another rigorous one on the losses

and recovery needs of black families (Moore, 1958). Lindell, Perry and Greene (1980) also made the following observation (p. 1):

Although reviews of the research literature indicate that little systematic data exists regarding minority groups in disasters (White and Haas, 1975, pp. 181-193), the information which is available suggests that minorities experience difficulties in adaptation which differ from those experienced by non-minorities. The probable existence of such difficulties is reflected, in some cases, by differentials in death and injury rates. Red Cross fatality counts indicate that disaster deaths are disproportionately high among ethnic minorities (Trainer and Hutton, 1972, p. 5).

The Lindell, Perry and Greene study, and a subsequent one by Perry, Greene and Mushkatel (1983), are valuable because they indicate that race, language, and frame of reference may have relevance to the believability and interpretation of media-generated disaster messages and the subsequent willingness to pursue the course of action recommended by those messages. It is certainly true that, for a large portion of the black community, the black media represent the only legitimate source of news and public information. As a result, the black media have a unique opportunity to influence the attitudes and behavior of a significantly large segment of the black community, and could play an important role in providing credible messages to persons in need of information regarding natural disasters.

The research reported here was guided by an open system perspective. That is, the black community is treated as a functioning part of the larger social system, an interacting subsystem of the overall urban community. The black media are organizationally linked with national networks and wire services, and, like the white-oriented media, the black media are connected through the requirements of economic survival to commercial interests in the urban community. Thus, the black media can be viewed as organizational units located in the context of larger urban social system units at multiple levels.

A second component of the open system perspective is the notion of system stress (Haas and Drabek, 1973). A condition of stress is said to exist for a social system when the demands placed on a given social unit exceed that unit's capacity to respond. In disasters, the affected social units (individuals, families, organizations, communities) attempt to deal with the rapid escalation in demands placed on them through various methods, including reduction in nonessential services, recruitment of additional help, and cooperation with other social units better able to respond to the emergency.

In the study of organizational responses to disasters, there is a need to consider individual and family responses to such events. The family may also be viewed as a unit that undergoes stress during disasters (Bolin, 1976, 1982; Bolin and Trainer, 1978; Bolin and Bolton, 1983; Drabek and Key, 1983). For reasons to be found in social and political history, black families typically compose a disproportionately large segment of the lower socioeconomic stratum in the United States. In several studies it has been suggested that poor black families are more likely to experience stress than families with greater financial resources (cf. Moore, 1958; National Urban League, 1979; Perry, Greene and Mushkatel, 1983; Bolin, 1983).

In order to cope with the stress of disasters, individuals and families will often modify their internal and/or external behaviors and activities. One of the most typical ways that families cope with stress is through establishment and activation of kinship ties and linkages with community and national organizations and agencies (Drabek et al., 1975; Bolin, 1976). The black media can help families victimized by disaster establish such linkages.

### Goals

Because a large portion of the black community views the black media as the only legitimate source of news and public information, the black media could play an important role in providing credible messages to persons in need of information regarding natural disasters. The overarching goal of this study was to foster a greater understanding of the role (or potential role) of the black media in disaster reporting, mitigation, and relief in the black community. To achieve this goal, the following objectives were established:

- To review and analyze existing knowledge of the role of the mass media in reporting predisaster warnings, preparedness, disaster impact, relief, recovery and rehabilitation;
- To review and analyze existing knowledge of the role of black-owned, black-managed, and black-operated mass media organizations in reporting information on natural disasters to the black community;
- 3) To identify gaps and inadequacies in the existing research on natural disasters, highlight information that holds implications for policymaking, and generate hypotheses for future studies;
- 4) To trace and interpret the sequence of actions taken by black media operators in Mobile, Alabama in gathering, selecting, and disseminating information about pre- and postdisaster activities;
- 5) To develop a model reflecting the structure and policies of the black media in reporting disaster-related information before, during and after Hurricane Frederic.
- 6) To assess the ability of the black media to reach large sections of the black community and to influence that community to take courses of action recommended for ensuring safety;
- 7) To describe and assess the current and potential ability of the local black media to educate the black community of Mobile, Alabama, concerning disaster mitigation, relief and recovery programs; and
- 8) To discuss application of the findings to black media at the national level.

### Research Plan

The primary data were gathered at the disaster site in Mobile, Alabama. An intensive case study approach was used, involving surveys of 200 black disaster victims and interviews with owners, managers and operators of black-owned and white-owned media, as well as Civil Defense officials and community leaders (see Appendix I). A content analysis was made of randomly selected newspaper reports appearing in both black- and white-oriented newspapers for a period of ten years before and two years after Hurricane Frederic.

The accumulated data were applied to five disaster stages: predisaster, warning, impact, immediate postimpact, and relief. During the five stages, the following black media activities were expected:

- 1) Hazard mitigation and preparedness messages
- 2) Warning messages
- 3) News gathering of impact information
- 4) Search and rescue information coordination
- 5) Dissemination of information on relief services.

After determining the accuracy of information disseminated by the black media and whether or not information was received by black residents, we then looked at 1) individual and community preparedness; 2) functional or dysfunctional behavior; and 3) use or disregard of information.