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HISTORY AND CURRENT ACTIVITIES OF
THE DISASTER RESEARCH CENTER

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The Center is frequently asked questions about its research activities, field operations, publications, services and funding sources. Even though this document is not a complete history or even a summary of all Center activities, it does attempt to answer the major questions most frequently asked.

Research Objectives

Since the Disaster Research Center (DRC) was established in 1963, it has engaged in a variety of different studies although its basic focus has remained the same. From the beginning, the Center's major research objective has been to analyze emergency organizations and their response to, as well as prior preparations for, large-scale community emergencies, particularly when a natural disaster agent was involved. Prior studies of disaster responses had primarily focused on the victims. Practically no attention had been given to the activities of the emergency organizations in the community, even though the actions of such groups generally determine the efficiency and effectiveness of the reactions in the emergency period. Thus, DRC decided to study organizations during the emergency period and has continued to focus on this area throughout most of its research.

During this past decade, DRC has extended the range of its general research interests. Although field studies of responses during the emergency period have continued, the Center has actually conducted considerably more studies of pre-impact and emergency planning during the past five years than it has of actual disaster-time activities. Twenty-two American cities were regularly monitored for community crises between 1968 and 1974; 18 are presently being monitored in conjunction with a study of acute chemical emergencies. In addition, the Center has increased the number of its longitudinal studies, using the emergency period responses as a base line against which change in organizations and community planning in the months and years after an event can be measured. Some restudies have been undertaken as long as five years after a disaster. Two longitudinal studies are currently being worked on by the Center. When civil disturbance flared in American cities and on university campuses, the Center became involved in an analysis of such events so that a comparison might be made between the organizational activity present in these situations and those in natural disasters. For about five years, the Center concentrated on this kind of research; however, for the most part, this line of study has been phased out.

In its early years, the Center focused almost exclusively on unexpected and sudden natural disasters, but the range of disaster-potential events included in DRC studies has increasingly expanded. Disasters resulting from technological accidents and more diffuse natural agents have consistently been given higher priority in recent Center research. In fact, an ongoing study of preparations for and responses to acute chemical disasters is one of the largest research efforts DRC has ever undertaken.

While organizations have continued to be the subject of DRC research interest, overall community coordination at times of disaster has been given a complementary emphasis. Indeed, many of the current research designs and

and field instruments of the Center use the community as the unit of study and analysis. Increasing emphasis has also been placed on the study of organized behavior as compared with organized entities in order to incorporate a collective behavior perspective into the research. Now, as much attention is paid to the emergence of informal groups as is paid to the functioning of complex formal bureaucracies.

In addition to these general research interests, the Center has completed or is in the process of conducting a series of more specialized studies. The problems encountered by delivery systems of certain kinds of crucial services in disasters have been a subject for DRC research. Recently, the Center concluded very large-scale studies of the delivery of emergency health care and of the delivery of mental health services during and after disasters and is presently examining the provision of shelters to disaster evacuees. Currently, research is being undertaken on the handling of mass casualties, the role of volunteers in disaster, legal aspects of natural disasters, images of behavior in disaster movies, role conflict in emergencies, short- and long-term problems of financial institutions in very large-scale disasters, cross-cultural responses to national catastrophes, panic flight behavior, the emergence of new groups during periods of stress, crisis intervention in disaster-related mental health problems, and methodological problems in field and observational studies of emergency situations. Past research has dealt with the operation of rumor control centers during community emergencies, problems in the use of emergency operating centers, long-run consequences of hospital emergency responses to major disasters, the role of the local community in preparing for diffuse emergencies such as water pollution, difficulties in implementing emergency and disaster planning, organizational changes as the result of disasters, police and fire department activities during disaster as well as problems in community crisis such as civil disturbances, the implementation of community disaster planning, the role of religious groups in mass emergencies, and the state of American disaster planning. Research has also been conducted on the effects of stress upon social processes by utilizing audio and recording devices in a laboratory in such a way as to simulate conditions paralleling real life stress situations. These studies have ranged from an examination of the communication behavior of police dispatching units to the cross-cultural interaction in stressful contexts. Although this research has now been completely phased out, laboratory studies were done for about ten years. Occasional large-scale mail surveys have been conducted to study, among other things, innovations developed by police and fire departments in the face of massive civil disorders, the emergency planning of radio and television stations, and the long-run consequences of disasters on selected social and psychological aspects of householders in disaster areas, including nonvictims as well as victims.

Center research has kept the tradition of social science study in the disaster area alive in the United States when it threatened to disappear. The Disaster Research Group in the National Academy of Sciences in Washington, D. C. flourished in the late 1950s, but ceased operation in 1963. The Disaster Research Center at Ohio State University not only took over the somewhat damaged and incomplete archives of the Disaster Research Group, but far more importantly, maintained the continuity of an American social science

orientation in disaster by building on their pioneering effort. For years, the Center stood alone with its ongoing program of disaster research and prevented a gap in continuity of disaster studies. Many new research groups dealing with the social and behavioral aspects of disasters are now in existence. However, the Center still continues to be the only organization in the United States that conducts new field studies of a broad range of disasters, and has a standby capability to engage in research on a wide variety of pre-, trans- and post-disaster problems.

All of this research is intended to provide basic knowledge about group behavior and social life under stress conditions as well as information which can be used to develop more effective plans for future emergencies. At the basic level, DRC's objective is to contribute to social science, especially sociological theories and methodology. At the applied level, the Center's goal is to help improve disaster preparedness and emergency responses.

At a time when policy relevance is of utmost concern, the work of the Center has been of practical value to those involved in disaster planning and emergency operations both in the United States and most likely elsewhere. In fact, some of the Center's research findings and observations have directly and indirectly been incorporated into the planning and operations of many public and private disaster agencies. This is particularly gratifying to DRC since many researchers never see any practical implementation of their studies. The findings of disaster research are now taken seriously, a position not very widespread in the social sciences even in those areas in which research has had important policy implications.

Research Procedures and Operations

A great deal of Center research is conducted by teams of trained research associates, mostly graduate students, who are sent to disaster sites. In some instances, there have been long warning periods, as in the case of floods and hurricanes, and DRC teams have reached disaster areas before impact. The initial team sent to a site usually carries out a reconnaissance study, making systematic observations of disaster-related activities and establishing contacts for possible later revisits to the locality. After the team returns to DRC, a decision is made as to whether or not this incident merits an examination of one or more disaster questions that the Center is currently researching. If it is determined that an in-depth study would be valuable in terms of Center research interests, teams of field researchers, equipped with tape recorders and appropriate interview guides and documentary checklists, return as often as is necessary to the disaster locality.

In accordance with this general procedure, DRC has conducted 190 field studies of actual natural or technological disasters, including everything from chlorine gas spills to earthquakes. The two most frequently studied disasters have been floods and tornadoes, with DRC having made 57 field studies of the former, and 25 field studies of the latter. A total of 24 disasters have been studied outside the United States. For purposes of comparison, teams have been sent to study organizational response to 27

civil disturbances in the United States and Curacao in the West Indies. DRC has also conducted field research of 38 Rumor Control Centers, 40 studies of civil disturbance planning, and 47 field studies of general disaster and emergency planning, usually at the community level. In the last few years, 19 communities have been studied in relation to their chemical disaster planning; over 20 on-site studies have been made of actual acute hazardous chemical incidents. In all, up to the present time, 412 field studies of different events have been carried out, involving at least 1,200 field trips.

These events have included earthquakes in Japan, Chile, Yugoslavia, Italy, Iran, El Salvador, Greece, Alaska, and California; hurricanes in Japan and most of the southern and eastern United States; floods in Italy, Canada and more than a dozen states; and tornadoes and hazardous chemical incidents all around America. Large explosions, forest fires, plane crashes, shore erosion episodes, destructive seismic waves, major dam breaks and massive blizzards have also been studied in Australia, Italy, Canada, and different parts of the United States.

Data is obtained in a variety of ways in the field although the primary source of information is derived through in-depth interviewing. This is supplemented by systematic participant observation as well as gathering documents and statistics. On occasion, mailed survey questionnaires have been used to complement field data. At this time, about 6,000 tape-recorded interviews, averaging around two hours each, have been collected; transcriptions of about 60 percent of the tapes processed so far total over 65,000 pages. Several thousand mail questionnaires have been accumulated and thousands of afteraction reports, disaster plans, organizational logs, and similar documents have also been gathered.

All data is obtained on a confidential basis; that is, the Center never identifies or uses names of actual persons in any of its reports. Tape recordings, documents and other material acquired by Center personnel during the course of the field work are only available for use by Center staff for specific research purposes. Most DRC publications either mask or omit the names of the communities and organizations which were studied.

The Center, while maintaining a scholarly and scientific approach to disaster research, has not assumed that only one methodology or theory can be used in disaster studies. Thus, the techniques used have ranged from quantitative to qualitative, from laboratory experiments to the clinical case study. The theoretical frameworks which have been applied have been drawn from social psychology and social organization and have dealt with social phenomena ranging from international or national complex bureaucracies to small informal ephemeral and emergent groups. Certain social science methodologies and theories have been used more than others, but there has been a conscious effort not to advocate any one of these approaches as the only one true path of knowledge and understanding about disaster phenomena. It is possible that the Center's attitude has prevented a rigid research orthodoxy from being adopted in this area and has made it easier for current and future researchers to employ diverse means and divergent theories without feeling that it would be violating traditional ways of conducting disaster studies.

Research Training and Service Functions

DRC is affiliated with the Department of Sociology at The Ohio State University. It is headed by Professor E. L. Quarantelli of the Department of Sociology who helped found the Center and has been the Director or Co-Director since its establishment. Almost all professional staff members are concurrently enrolled in master's or Ph.D. programs and are from such disciplines as sociology, public administration, social work, political science, business organization, journalism, and counseling psychology. The graduate research associates who comprise the field work staff have numbered as high as 19 at one given time. Administrative and secretarial personnel along with undergraduate research aides provide the necessary supportive services. As many of 59 persons have been on the DRC staff although the average number has been about two dozen with present personnel numbering about 15.

Throughout its history, the Center has provided either complete or partial support to over 100 graduate students for as long as four years. In addition, the Center has given employment to nearly 300 undergraduate students. Data gathered through the Center's research activities has been the subject of 26 dissertations. Center research projects have presented staff members with an opportunity to develop ideas and gain practical experience in field research techniques as well as to understand the whole research process from problem formulation to report writing.

A special agreement exists between DRC and Emergency Planning Canada whereby recipients of EPC fellowships in the sociology department at the Ohio State University are research associates at the Center. Thus, these fellows receive intensive research training in the disaster area, and DRC, in turn, draws upon their services for field research in Canada and elsewhere. This arrangement has brought seven fellows to the Center thus far; four have already graduated with a Ph.D. degree.

A substantial majority of the currently active sociological researchers in North America with major interests in the social science aspects of disasters are either former DRC staff members or have been trained by sociologists who were at one time associated with DRC. At a time when no one else was involved in disaster research, the Center was producing sociology graduates with an interest, background and competence in this area as well as providing them the opportunity to establish the socio-professional links to one another so crucial for advances in scientific knowledge. These former staff members have been or are presently members of faculties in universities ranging from the University of Canterbury, New Zealand to Columbia University, USA; from Corpus Christi College, Fiji to Michigan State University, USA; and from the University of Calgary, Canada to the University of California at Los Angeles (UCLA), USA. After leaving the Center, many have maintained their professional interest in disaster research and have made their own independent contributions to disaster research and literature. Some have moved into very responsible positions in the disaster area.

DRC is often asked to address and advise organizations throughout the world on topics related to disaster research. These service activities-- speeches, lectures, committee and workshop participation, consultation-- have involved a variety of public/private groups and agencies.

Center personnel have participated in the programs of such national groups as the American National Red Cross; the Council of State Governments; the School of Aerospace Medicine, Texas; the International Association of Chiefs of Police; the Natural Hazards Workshop; the Army Corps of Engineers; the National Association of State Civil Defense Directors; and the American Hospital Association. The DRC staff has assisted several states with their disaster plans and has briefed groups of top officials in the Department of State and in Health, Education and Welfare. Staff members have participated in disaster conferences held by the National Institute of Mental Health, the Office of Emergency Planning, the Defense Civil Preparedness Agency, the National Bureau of Standards, the Agency for International Development, and several church groups. The Center has hosted a symposium on Human Responses to Disaster attended by representatives from many of the medical schools in the U. S.

DRC Co-Directors have served as members of a number of national bodies including the Advisory Committee on Emergency Preparedness of the National Academy of Sciences, the Advisory Board on the Assessment of Research on Natural Hazards, the Special Advisory Board on Emergency Housing of the National Research Council, the Panel of Public Policy Implications of Earthquake Prediction, and the Committee on Mass Media and Disasters.

At the international level, consultations and meetings have been held with governmental officials and disaster planners in Greece, Holland, Japan, Canada, Sweden, Australia, Yugoslavia, France, Turkey, England, Egypt, Italy, India, Switzerland as well as with the League of Red Cross Societies and the United Nations Disaster Relief Office. The Japan-United States Disaster Research Seminar on Organizational and Community Responses to Disasters was hosted for a week by DRC in 1972. The Center is regularly visited by emergency planners and disaster researchers from many nations around the world.

Center personnel have participated in many international conferences and meetings such as the International Red Cross Pre-Disaster Preparedness Seminar in Trinidad the International Seminar on the Ecology of Natural Disasters in Belgium, the Workshop on Crisis Research of the Swedish Civil Defense, the International Conference of Disaster Researchers in France, the United States-Japan Workshop on Fire Research in Japan, the Australian Natural Hazards Symposium, the International Symposium on Disasters and Accidents in West Germany, and others.

Additionally, DRC staff members have made presentations at the London Technical Group in England, the Tokyo Metropolitan Police Board in Japan, the Canadian Emergency Measures Organization, the Center for the Psychosocial Study of Catastrophes in France, the Swedish Civil Defense Administration, the Greater Manchester England Emergency Planning Council, and the American University in Cairo, Egypt.

Many visitors use the DRC library which is housed at the Center since it has many items not available anywhere else, e.g., primary interview data from pioneering studies done in the early 1950s. In fact, the Center is the only such repository of disaster research material in the social and behavioral science area. The collection includes material from the original archives of the Disaster Research Group of the National Academy

of Sciences as well as items donated to the library by disaster researchers elsewhere, e.g., from past studies done at Michigan State, the University of Texas, the National Opinion Research Center at the University of Chicago, Wichita State University and Goshen College. An effort is made to obtain copies of all disaster-relevant published and unpublished reports and papers, dissertations and thesis, and books and monographs written by researchers in this country or elsewhere that come to the attention of the Center. In addition to the printed works, the library also has a small microfilm, microfiche, film, and photo collection of disaster-related items.

Publications

DRC has reported its studies and research to different kinds of audiences in a variety of ways. This information has been disseminated by means of lectures and papers, seminars and conferences, professional articles and monographs, and the Center's own publications. Almost 500 items have been published by DRC personnel.

Among the scholarly journals in which Center research has been reported are the following: Social Forces, Journal of Hazardous Materials, American Sociological Review, Journalism Quarterly, Issues in Criminology, International Journal of Legal Research, Journal of Communication, Society, Phylon, American Journal of Sociology, Water Resources Bulletin, Victimology, Human Organization, Indian Sociological Bulletin, Psychology Today, Reviews in American History, New Society, Trans-Action, Disasters, Sociology and Social Research, Il Politico, Sociology Inquiry, Mass Emergencies, Journal of Broadcasting, Canadian Journal of Sociology, Urban Affairs Quarterly, International Journal of Contemporary Sociology, and The Journal of Police Science and Administration. Center personnel have also authored articles that have appeared in more than four dozen readers and collections.

DRC Co-Directors have been asked to edit special issues of different journals. Among these was the January, 1970 issue of the American Behavioral Scientist whose theme was, "Groups and Organizations in Disaster." The 14 articles covered a range of topics from disaster research methodology to cross-cultural perspectives. The January, 1973 issue of American Behavioral Scientist was also edited by a DRC Co-Director and was devoted to, "The Dynamics of Organizational Involvement and Change in Racial Civil Disturbances." It focused on the local community and the consequences of disturbances on its organizational life. A special issue of Mass Emergencies in 1977 was edited by a DRC Co-Director. The theme of that issue was, "The Delivery of Emergency Medical Services in Disasters." Most of the nine articles reported on the Center's research in the area. A special issue of the Journal of Hazardous Materials in late 1980 will also be edited by DRC and will primarily deal with DRC's study of socio-behavioral response to acute chemical emergencies.

The Center has its own publication program and produces a Book and Monograph Series, a Report Series, and a Historical and Comparative Disasters Series. Fifteen publications are included in the Book and Monograph Series, with the next scheduled addition being The Delivery of Emergency Medical Services in Disasters: Assumptions and Realities.

There are 17 publications in the Report Series. The next work to be added to this series is An Inventory of Social Science Research Studies which will be the only annotated bibliography of all social science studies that have been undertaken throughout the world.

The Center also publishes a newsletter, Unscheduled Events, which was issued quarterly, but is now published on an irregular basis. Earlier issues primarily reported on non-DRC disaster research and the research literature; more recent issues have to a greater extent focused on DRC studies. At the present time, Unscheduled Events is also serving as the newsletter for The International Working Group for the Study of the Social and Behavioral Aspects of Disasters, which is temporarily being coordinated by the Center.

DRC personnel have presented papers at many professional meetings such as the American Association for the Advancement of Science; the Canadian Sociology and Anthropology Association; the International Symposium on Victimology; the American Meteorological Society; the American Sociological Association; the American Chemical Society; the American Water Resources Conference; the American Public Health Association; the National Symposium on Law Enforcement Science Technology; the Society for the Study of Social Problems; the American Psychological Association; the World Congress of Sociology; the Inter-American Conference on Criminology; the Southwest Sociological Association; the Human Factors Society; the Emergency Medical Services Bicentennial Meeting; the National Council of Community Mental Health Centers; and many others.

Funding Support

The Center's work would have been impossible without substantial financial support. DRC has no endowment and receives no direct University funds. Indirect support is provided by the sociology department through an assignment of an administrative assistant position to the Center. Interested agencies or organizations have almost exclusively funded DRC's operations. These grants and contracts almost total two dozen in number.

DRC has received major funding from the following sources: initial funding support and the most continuous research funding has been provided by the U. S. Office of Civil Defense which later became the Defense Civil Preparedness Agency (DCPA) and is now incorporated in the Federal Emergency Management Agency (FEMA). The Center for Studies of Mental Health and Social Problems, Applied Research Branch, National Institute of Mental Health has also been a very important research supporter from 1968 through 1978. From 1964 through 1970, DRC's laboratory studies were sponsored by the U. S. Air Force Office of Scientific Research from which the facilities of the Behavioral Sciences Laboratory at Ohio State University were partly developed. More recently, the major funding for Center research has come from the National Science Foundation.

Other governmental agencies which have provided less extensive research and administrative support to the Center include the Health Resources Administration; the Office of Water Resource Research of the U. S. Department of the Interior; the Law Enforcement Assistance Administration of the Department of Justice; the Applied Research Branch, Extra-mural Research Program of the National Institute of Mental Health; the State of Ohio Department of Mental Health and the Advanced Research Projects Agency.

Non-public organizations that have supported the work of the Center on a small scale either directly or indirectly (via personal grants to Center personnel) include the National Association of Broadcasters, the Ohio Council of Churches, the Disaster Research Services, and the Social Science Research Council. The Social Science Program of the Merston Center of The Ohio State University has been another very important source of research funding since it has provided the financial support for DRC's field studies outside the United States.