

*D I S A S T E R*  
*R E S E A R C H*  
*C E N T E R*

*2002 Annual Report*

*University of Delaware*  
*Newark, Delaware*

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***Disaster Research Center  
Personnel***

***Research Staff***

*Kathleen J. Tierney, Director*  
*Benigno Aguirre, Senior Faculty Associate*  
*Joanne M. Nigg, Faculty Affiliate*  
*Russell R. Dynes, Professor Emeritus*  
*E. L. Quarantelli, Professor Emeritus*  
*James M. Kendra, Research Coordinator*  
*Tricia Wachtendorf, Research Field Director*

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***Administrative Assistant***

*Natalie Lamoreau*

***\*\*\*\****

***Postdoctoral Research Fellow***

*James M. Kendra*

***\*\*\*\****

***Graduate Research Assistants***

*Victor Argothy*  
*Rory Connell*  
*William Donner*  
*Heather Griffiths*  
*Milton Melendez*  
*Brian Monahan*  
*Gabriel Santos*  
*Xuwen Sheng*  
*Christopher W. Steinbrecher*  
*Joseph Trainor*  
*Tricia Wachtendorf*

*Undergraduate Research Aides*

<i>Carl D. Bernard III</i>	<i>Jill Cope</i>
<i>Elizabeth Curtis</i>	<i>Tina Diablo</i>
<i>Wendy Garcia</i>	<i>Brynn Girten</i>
<i>Franz Henggeler</i>	<i>Alayna Jehle</i>
<i>Robert Justiniano</i>	<i>Carla MacKenzie</i>
<i>Sean Marsula</i>	<i>Liana Mechali</i>
<i>Carla Russell</i>	<i>Evan Shows</i>
<i>Annie Tanverdi</i>	

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*Resource Collection Staff*

*Christine Bush*

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## ***2002 Publications***

### ***Articles and Book Chapters***

#### ***Aguirre, Benigno***

“The EMA Workshop in Australia.” *International Journal of Mass Emergencies and Disasters* 20(3).

“Can Sustainable Development Sustain Us?” *International Journal of Mass Emergencies and Disasters* 20(2): 111-126.

“Can Sustainable Development Sustain Us? A Response to Allen H. Barton, John Handmer, and Dennis S. Mileti.” *International Journal of Mass Emergencies and Disasters* 20(2): 139.

#### ***Bruneau, Michel and Kathleen J. Tierney***

“Market-Focused and Open-Systems Approaches to Earthquake Loss Reduction: Contextualizing the Role of Engineering Research.” *Natural Hazards Review* 3(2): 48-54.

#### ***Connell, Rory***

“The Impact of the Y2K Threat on Hospital Emergency Preparedness.” Pp. 87-96 in *Student Research Accomplishments, 2001-2002*. Buffalo, New York: Multidisciplinary Center for Earthquake Engineering Research.

#### ***Kendra, James. M, Tricia Wachtendorf, and E.L. Quarantelli***

“Who Was in Charge of the Massive Evacuation of Lower Manhattan by Water Transport on September 11? No One Was, Yet It Was an Extremely Successful Operation. Implications?” *Securitas* 1(5): 3-5.

#### ***Quarantelli, E. L.***

“Urban Vulnerability in Disasters in Developing Countries: Managing Risks.” Pp. 237-262 in *The Future of Disaster Risk: Building Safer Cities: Conference Papers*, edited by Alcira Kreimer, Margaret Arnold and Anne Carlin. Washington, D.C.: The World Bank.

“The Role of the Mass Communication System in Natural and Technological Disasters and Possible Extrapolation to Terrorism Situations.” *Risk Management: An International Journal* 4: 7-22.

“The Disaster Research Center (DRC) Field Studies of Organized Behavior in Disaster.” Pp 94-116 in *Methods of Disaster Research*, edited by Robert Stallings. Philadelphia: Xlibris.

### ***Tierney, Kathleen J.***

“Strength of a City: A Disaster Research Perspective on the World Trade Center Attack.”  
Published on the Web by the Social Science Research Council at  
<http://www.ssrc.org/sept11>.

“The Field Turns Fifty: Social Change and the Practice of Disaster Field Work.” Pp. 349-374 in *Methods of Disaster Research*, edited by R.A. Stallings. Philadelphia: Xlibris.

## ***Technical Reports***

### ***Wachtendorf, Tricia, Rory Connell, Brian Monahan, and Kathleen J. Tierney***

Disaster Resistant Communities Initiative: Assessment of Ten Non-Pilot Communities.  
Newark, DE: University of Delaware Disaster Research Center.

# *M.A. Thesis*

*Connell, Rory*

“Disaster Mitigation in Hospitals: Factors Influencing Organizational Disaster-Making on Hazard Loss Reduction.” Department of Sociology, University of Delaware, Newark, DE.

## *Academic Presentations*

### *Aguirre, Benigno*

“Can Sustainable Development Sustain Us?” Presidential Address at IRCD meetings, July, Brisbane, Australia.

“A Conceptual Framework for Collective Behavior and Action and Its Application to U.S. Student Riots in the 1990s.” Paper Presented at the annual meeting of the American Sociological Association, August 16-19, Chicago, Illinois.

### *Connell, Rory*

“Preparing for Y2K and JCAHO: Incentives for Hospital Rehabilitation and Preparedness.” Presentation at the Multidisciplinary Center for Earthquake Engineering Research Annual Meeting, March 6-9, Buffalo, NY.

“The Impact of the Y2K Threat on Hospital Emergency Preparedness.” Presentation at Multidisciplinary Center for Earthquake Engineering Research Annual Student Leadership Council Retreat, August 2-4, Buffalo, NY.

“Collective Behavior in the September 11, 2001 Evacuation of the World Trade Center.” Paper presented at the annual meeting of the American Sociological Association, August 16-19, Chicago, IL.

### *Dynes, Russell R.*

Discussant, “Responding to the Unexpected.” Research Issues, National Science Foundation Workshop, February 27-March 1, New York, NY.

“Finding Order in Disorder.” Plenary Address, Mid South Sociological Association, October 18, Memphis, TN.

### *Dynes, Russell R., Gary Webb and John Paul*

“Working in the Rubble: The Oklahoma City Bombing and the Social Construction of Reality.” Paper presented at Mid South Sociological Association, October 17, Memphis, TN.

***Kendra, James M. and Tricia Wachtendorf***

“Creativity in Emergency Response after the World Trade Center Attack.” Paper presented at the Annual Meeting of the International Emergency Management Society, May 14, Waterloo, Canada.

“Rebel Food...Renegade Supplies: Convergence after the World Trade Center Attack.” Paper presented at the annual meeting of the American Sociological Association, August 17, Chicago, IL.

***Monahan, Brian***

“From Ground Zero to Ground Hero: Status Appropriation and FDNY” Paper presented at the annual meeting of the American Sociological Association, August 16-19, Chicago, IL.

***Quarantelli, E. L.***

“Role of the Mass Media.” Presentation at Natural Academy of Sciences Forum on “Countering Terrorism: Lessons Learned From Natural and Technological Disasters.” February 28 – March 1, Washington, D.C.

“Observations on Disaster Management Operations.” Presentation at the Ecole Superieur Des Mines, March 20, Paris, France.

“Disaster Associated Anti-Social and Criminal Behavior: The Research Evidence.” Presentation at Hazard 2002, the 9<sup>th</sup> International Symposium on Natural and Human-Made Hazards, October 3-6, Antalya, Turkey.

***Tierney, Kathleen J.***

“Lessons Learned from Research on Group and Organizational Response to Disasters.” Invited presentation at National Academy of Sciences Forum on “Countering Terrorism: Lessons Learned from Natural and Technological Disasters.” February 28-March 1, Washington, D.C.

“Social Science, Hazards, and Disasters: A Brief Overview and Some Applications.” Seminar presentation at Columbia University, Institute for Social and Economic Research and Policy, May 16, New York City.

“Businesses and Disasters: Lessons Learned from Andrew and Other Disasters in the U.S.” Presentation at the Andrew +10 Summit, Florida International University, May 30, Miami, FL.

“Overview: Conceptualizing and Measuring Resilience for Physical and Organizational Systems.” Presentation at the Multidisciplinary Center for Earthquake Engineering Research Workshop on Lessons Learned from the World Trade Center Attack, June 25, New York City.

“Community Response to the World Trade Center Attack: Lessons Learned and Parallels with Research on Group and Organizational Responses to Disasters.” Plenary presentation at the annual Natural Hazards Workshop, July 15, Boulder, CO.

“Community Response to the World Trade Center Attack: Achieving Resilience in the Face of Near-Catastrophic Events.” Plenary presentation at the 7<sup>th</sup> National Conference on Earthquake Engineering, July 24, Boston, MA.

“Not Again! Recycling Disaster Myths in the Aftermath of 9-11.” Paper presented at the annual meeting of the American Sociological Association, August 16-19, Chicago, IL.  
“Risk Communication and Hazards: Lessons From Research.” Invited presentation at the National Academy of Sciences Forum on “Alerting America: Effective Risk Communication,” sponsored by the NAS Natural Disasters Roundtable, October 31, Washington, D.C.

### ***Wachtendorf, Tricia***

“Influences of Social Demographic Factors and Past Earthquake Experience on Earthquake Risk Perception.” Paper presented at the Annual Workshop for the Comparative Study on Urban Earthquake Disaster Management Sponsored by Kyoto University and Tokyo University, February 15, Kobe, Japan.

“The Future of Disaster Research: An American Perspective.” Invited Panelist for the Panel on Young Scholars in the Field of Disaster Research, Annual Workshop for the Comparative Study on Urban Earthquake Disaster Management Sponsored by Kyoto University and Tokyo University, February 15, Kobe, Japan.

“Building Capacities and Confronting Constraints in Community-Based Disaster Mitigation.” Presentation at the Annual Meeting of the Southwestern Social Science Association, March 29, New Orleans, LA.

“Rising from the Ashes: Organizational Adaptation Following the September 11<sup>th</sup>, 2001 World Trade Center Attack.” Presentation at the International Research Committee on Disasters Meeting at the Meeting of the International Sociological Association's World Congress of Sociology, July 11, Brisbane, Australia.

# ***Presentations to Governmental Bodies And Professional Organizations***

## ***Quarantelli, E.L.***

“The Nature of Crises and Individual/Group Behavior in Disasters,” “Research Based Principles of Disaster Planning and Managing,” and “Findings and Observations About Hospitals and EMS Systems in Disasters: The Actual Versus the Ideal.” July 11-12, three presentations at the Suburban Emergency Management Project of the Dupage County, Illinois Task Force.

“Urban Vulnerability to Disasters in Developing Societies: The Need for New Strategies and Better Application of Valid Planning and Managing Principles.” Presentation at Symposium on the Future of Disaster Risk: Building Safer Cities. The World Bank, December 4-6, Washington, D.C.

## ***Tierney, Kathleen J.***

“Social Science and Disaster Research Perspectives on the September 11 Attacks,” Presentation at Congressional briefing on “Human Response to Disaster.” April 24, Washington, DC

“The Crisis Management Planning Process.” Invited presentation at the annual meeting of the Maryland College Health Nurses Association, University of Delaware, June 12, Newark, DE.

## ***Wachtendorf, Tricia***

“A Changing Risk Environment: Lessons Learned from the 9/11 World Trade Center Attack.” Invited Presentation for the Manitoba Disaster Management Conference, Special Session Sponsored by the Canadian Emergency Preparedness Association, March 6, Winnipeg, Canada.

“Emergency Management in a Changing World: Lessons Learned from the 9/11 World Trade Center Disaster.” Invited Presentation for the Social Perspectives on Disaster Workshop Sponsored by Emergency Management Australia, July 2, Mt. Macedon, Australia.

## ***Disaster-Related Academic Activities***

### ***Aguirre, Benigno***

Elected President. Research Committee on Disasters, International Sociological Association.

Organizer and Chair. Session on Disasters and the Environment , SAAEI 2001, Matanzas, Cuba, 17-19 September.

Book Review Editor. *Natural Hazards Review*.

### ***Connell, Rory***

Vice-chair. Student Leadership Council. Multidisciplinary Center for Earthquake Engineering Research.

### ***Dynes, Russell R.***

Presenter. E.L. Quarantelli Award for “Notable and Significant Theoretical Work by a Social Scientist,” International Committee on Research on Disaster, World Congress of Sociology, Brisbane, Australia, July 1.

Reviewer. *Disasters: International Journal of Mass Emergencies and Disasters, Journal of Contingencies and Crises Management*.

Review of Ted Steinberg’s *Acts of God: The Unnatural History of Natural Disaster in America*. *Journal of Contingencies and Crisis Management* 10(1).

### ***Kendra, James M.***

Discussant. “Managing the Response to the September 11 Attacks: Observations from Research and Practice.” 27<sup>th</sup> Annual Hazards Research and Applications Workshop, Boulder, CO, July 14-17.

Blue Ribbon Plenary Panelist. The International Emergency Management Society. 9<sup>th</sup> Annual Conference, Waterloo, Canada, May 14-17.

## ***Quarantelli, E. L.***

Manuscript Reviewer. *Risk Management: An International Journal*; *Disasters: The Journal of Disaster Policy, Studies and Management*.

Electronic Manuscript Reviewer. National Science Foundation.

Appointed Editorial Board. *Risk Management: An International Journal*.

Appointed Editorial Board. Palgrave Publisher Series on Disasters and Crisis Management.

Member of Recommending Committee for the 2003 International Symposium on Crisis Management in Times of Flood Disasters to be held in Middlebig, The Netherlands, May 8-10.

Organizer for the ISA Research Committee on Disasters two sessions on 9/11 studies at the ASA Annual Meeting, Chicago, Illinois, August 16 and August 18.

## ***Tierney, Kathleen J.***

Member. Steering Committee, Center for Disaster Management and Humanitarian Assistance.

Editorial Board. *Natural Hazards Review*.

Member. Technical Advisory Committee, Project on Managing Catastrophic Risk, Wharton Risk Management/Decision Process Center, The Wharton School, University of Pennsylvania.

## ***Other Disaster-Related Professional Activities***

### ***Kendra, James M.***

Interview. *Christian Science Monitor*, August 28.

Manuscript Reviewer. *Contemporary Disaster Reviews, International Journal of Emergency Management, Research in Social Problems and Public Policy*.

### ***Quarantelli, E. L.***

Member. GAO Electronic Expert Panel on Mitigating Terrorist and Other Risks to Water Supplies and Systems.

Member. Scientific Advisory Board for the International Institute for Applied Systems Analysis Meeting on Integrated Disaster Risk Management: Megacity Vulnerability and Resilience, Laxenburg, Austria.

Reviewer for FEMA Higher Education Program draft chapters in a course on Theory, Principles and Foundations of Disasters of Disaster and US Emergency Management.

### ***Tierney, Kathleen J.***

Member. Advisory Committee, Federal Emergency Management Agency/National Institute of Building Sciences study on costs and benefits of pre-disaster mitigation programs.

Guest Speaker. "Talk of the Nation," National Public Radio nationally-syndicated talk show, featuring discussion on group responses under conditions of stress, July 31, 2002.

Advisor. Federal Emergency Management Agency and National Institute of Building Sciences study on developing a framework for assessing the effectiveness of mitigation measures in reducing earthquake losses, Phase I, 2001-2002.

Co-author. Plan to coordinate post-earthquake investigations conducted under the National Earthquake Hazards Reduction Program (NEHRP) 2001-2002.

### ***Wachtendorf, Tricia***

Interview. Discussed findings from research activities following the World Trade Center attack, on five radio stations throughout Australia. July 3-7.

## *Current and Recent Research Projects*

***Organizational and Community Resilience in the World Trade Center Disaster.*** This project focuses on the manner in which emergency management and crisis-relevant organizations in the City of New York coordinated with other responding organizations and jurisdictions to develop multi-organizational strategies for managing the World Trade Center Disaster. The project uses the World Trade Center attack and its aftermath as a case study to address longstanding issues in the disaster research literature, such as the relationship between planning, emergence, and improvisation in disaster response activities; how multi-organizational response networks develop and function, and how resilience is achieved in complex response networks. Research activities for this study consist of field work and direct observation in settings in which response and recovery activities are coordinated; interviewing; and document collection and analysis. This study is being conducted with support from the National Science Foundation and the Multidisciplinary Center for Earthquake Engineering Research.

***Anticipating Emergency Management Needs in Large Scale Community Crisis: Lessons Learned from the World Trade Center Attack and Other Major Disasters.*** This study is designed to address the need for improved management of large-scale and near-catastrophic disasters, including both natural disasters and those originating from intentional acts, such as terrorist attacks. This study, which complements the World Trade Center project described above, involves the collection and analysis of data on the World Trade Center attack in New York City as well as a review of findings from research on other near-catastrophic disaster events. The study, which is being conducted under the sponsorship of the Public Entity Risk Institute (PERI), is designed to produce guidance that can be used by jurisdictions throughout the U.S. as they develop and modify their plans for coping with community wide crises.

***Evacuation and Vulnerability in Mexico.*** In 1999, major floods impacted the Mexican states of Veracruz and Puebla. In collaboration with investigators from Mexico City's Centro de Investigacion y Estudios de Antropologia Social (CIESAS), the Disaster Research Center is conducting research in communities affected by the flooding in order to: (1) obtain data on the services at-risk populations received from public agencies charged with disaster mitigation and reduction responsibilities; (2) document the ethno-knowledge and customs used by these populations to minimize flood risks and impacts; and (3) explore the extent to which existing social science knowledge on disaster-related evacuation behavior—most of which is based on studies conducted in the United States—can be replicated in a Third-World context. Funding for this project has been provided by the National Science Foundation and the Federal Government of Mexico.

***Mobilizing Support for Earthquake Loss Reduction: Lessons and Guidance for Seismic Safety Advocates.*** The objective of this project, which is being carried out in collaboration with social science investigators from the Mid-America Earthquake Center and the Pacific Earthquake Engineering Research Center, is to analyze findings from social science research in order to develop guidance for advocates of earthquake safety at state and local levels. DRC's research activities for this study consist of analyzing research findings on risk communication and on collective action strategies that can be applied to enhance earthquake loss-reduction efforts. This project is supported by the Federal Emergency Management Agency.

***Perceptions of Earthquake Impacts and Loss-Reduction Policy Preferences Among Community Residents and Opinion Leaders.*** This study, which is being conducted under the National Science Foundation's US/Japan "Common Agenda" collaborative research program on urban earthquake hazards, focuses on public and stakeholder views of the potential consequences of major earthquakes, their support for loss-reduction policies, and their attitudes with respect to acceptable levels of risk. The study site for this project is Alameda County, in the eastern San Francisco Bay Area. In 1999, in the first phase of the study, DRC

conducted a mail survey with a representative sample of over 700 households in Alameda County! Oakland, California. In the second phase of the project, eight focus group discussions were carried out to obtain information on the risks perceptions and seismic policy views of members of four East Bay stakeholder groups: public officials, community residents, business owners, and practicing engineers. DRC is collaborating on this project with investigators from the Center for Disaster Reduction Systems at Kyoto University's Disaster Prevention Research Institute.

***Trinet Policy Studies and Planning Activities in Real-Time Earthquake Warning.*** Beginning in 1999, in collaboration with researchers from the UCLA School of Public Health and EQE, a private research and consulting firm, DRC carried out a study to assess the feasibility of implementing a rapid, real-time earthquake alert system for the Greater Los Angeles area. DRC's activities on this project consisted primarily of analyzing findings from the research literature on risk communication, warning response, and warning systems to determine the extent to which organizations and individuals would be able to take meaningful protective actions during earthquake shaking, given the very short warning periods that would be possible for most earthquakes that could occur in the study region. Funds for this study were provided by the Trinet Program, which is administered by the California Institute of Technology and funded by the State of California, Governor's Office of Emergency Services and the Federal Emergency Management Agency.

***Multidisciplinary Center for Earthquake Engineering Research (MCEER).*** DRC is a core member of MCEER, a multi-university consortium that conducts research on earthquake loss reduction issues and strategies from a range of disciplinary perspectives. The MCEER consortium, based at the State University of New York at Buffalo, is funded by a 5-year, \$10 million grant from the National Science Foundation. In addition to the World Trade Center study outlined above, other MCEER-sponsored projects conducted by DRC include the following:

***1) Use of New Technologies in Emergency Management.*** It is commonly assumed that advances in information technology have revolutionized operations in both public and private sector emergency management organizations. However, in the disaster field, little is known about the extent to which promising technologies are actually being employed to manage hazards and disasters, and to what effect. This study, which was carried out from 1999 to 2002, attempted to learn more about how local emergency management agencies use technology for hazard assessment, planning and training, and emergency response management. Data for the project were being collected through focus group discussions with emergency personnel in six communities around the US.

***2) Measures of Community Resilience.*** Over approximately the last ten years, recognition has grown that rather than responding and recovering when disasters strike, communities should be paying much more attention to pre-event mitigation—that is, to activities designed to lessen the impact of disasters. While the concept of “disaster resistant community” is gaining widespread acceptance, more research is needed to better define and operationalize that concept. The “Measures of Resilience” project attempts to develop measures or indicators of disaster resistance that span engineering and societal definitions of resilience as well as all phases in the disaster cycle. When developed, this comprehensive set of measures will make it possible to assess the extent to which communities are moving toward higher levels of disaster resistance.

***Disaster Resistant Communities Initiative: Process Evaluation of FEMA's Project Impact.***

In 1997, the Federal Emergency Management Agency began the pilot stage of Project Impact, a program designed to encourage local communities to step up their efforts to contain future disaster losses. The goals of the program were to mobilize resources, stimulate the development of partnerships, spur mitigation activities, and enable communities to cope more effectively when disasters occur, so as to reduce long-term losses. Using face-to-face and telephone interviews, focus group discussions, and other data collection methods, DRC has been charting the progress of Project Impact, first in the seven pilot communities in which the program was initiated, and later in an additional ten communities that joined Project Impact in subsequent years. In 2002, DRC conducted field work in ten communities (matched on hazards and sociodemographic characteristics) that do not have Project Impact programs, to determine whether federal assistance has had a discernable effect on community loss-reduction activities. This study is being carried out under the sponsorship of the Federal

Emergency Management Agency.

***Businesses and Disasters: Consequences of Disaster Victimization for Businesses and Business Districts.*** This study, which was initiated in 1996 with funding from the National Science Foundation, addressed three related research questions: (1) Years after their occurrence, what longer-term consequences do disasters have for businesses in disaster-stricken areas? (2) What factors are associated with business recovery in the aftermath of disasters? and (3) What consequences does heavy and concentrated damage to business and commercial districts have for those commercial areas and their communities? This project focused on Santa Cruz County, California, which was heavily affected by the 1989 Loma Prieta earthquake, and South Dade County, Florida, which experienced severe damage from Hurricane Andrew in 1992. Data for the study consist of business survey data from both communities as well as qualitative interview and case study material on recovery processes in heavily-damaged business centers.

*Disaster Research Center  
Field Studies*

*January 11*

*New York, New York*

*May 8*

*Community field work,  
New Technologies Study  
(Name of Community Confidential)*

*June 3*

*New York, New York*

*August 27-29*

*Community field work,  
New Technologies Study  
(Name of Community Confidential)*

*September 10 – 12*

*New York, New York*

*October 1 – November 15*

*New York, New York*

*October 6 – November 22*

*Field work in Nine Communities  
FEMA Project Impact Study  
(Names of Communities  
Confidential)*

## *Visitors to DRC*

*India*

*Regional Centre for Urban &  
Environmental Studies*

*Italy*

*Universita Cattolica del Sacro  
Cuore Dipartimento di  
Sociologia*

*Japan*

*Crisis Management &  
Preparedness Organization*

*Kuwait*

*Kuwait University*

*Russia*

*Institute for System Analysis-  
Russian Academy of Sciences*

*Taiwan*

*Sun Yat-Sen Institute for  
Social Sciences & Philosophy,  
Academia Scinia*

*U.S.A.*

*National Institute of  
Standards & Technology*

*McKinsey & Company Inc.*

*Millersville University*

*Human Factors & Usability  
Consulting*

*Carleton University*

*New Jersey Institute of  
Technology*

*U.S.A. cont.*

*National Institute of Justice*

*The Thorton-Tomasetti  
Group Inc.*

*National Science Foundation*

*New York Fire Department*

*Federal Emergency  
Management Agency*

*College of William & Mary*

*ICF Consulting*

*Venezuela*

*Fundacion Venezolana de  
Investigaciones Sismologicas*

## *New Preliminary Papers*

### *Aguirre, Benigno*

“Information Seeking Behavior in Collective Surges: Testing Alternative Collective Behavior Formulations.”

### *Dynes, Russell R.*

“Disaster and Development, Again.”

“Finding Order in Disorder: Continuities in the 9/11 Response.”

### *Kendra, James M. and Tricia Wachtendorf*

“Creativity in Emergency Response and the World Trade Center Attack.”

### *Quarantelli, E.L.*

“The Protection of Cultural Properties: The Neglected Social Science Perspective and Other Questions and Issues That Ought To Be Considered.”

### *Tierney, Kathleen*

“Disaster Beliefs and Institutional Interests: Recycling Disaster Myths in the Aftermath of 9-11.”

### *Wachtendorf, Tricia and Xuewen Sheng*

“Demographics and Experiences as Factors of Earthquake Risk Perceptions.”