

## Improving Disaster Management The Role Of It In Mitigation Preparedness Response And Recovery Author Committee On Using Information Technology To Enhance Disaster Management May 2007

Approaches to Managing Disaster - Assessing Hazards, Emergencies and Disaster Impacts demonstrates the array of information that is critical for improving disaster management. The book reflects major management components of the disaster continuum (the nature of risk, hazard, vulnerability, planning, response and adaptation) in the context of threats that derive from both nature and technology. The chapters include a selection of original research reports by an array of international scholars focused either on specific locations or on specific events. The chapters are ordered according to the phases of emergencies and disasters. The text reflects the disciplinary diversity found within disaster management and the challenges presented by the co-mingling of science and social science in their collective efforts to promote improvements in the techniques, approaches, and decision-making by emergency responders and the public. This text demonstrates the growing complexity of disasters and their management, as well as the tests societies face every day.

The focus of this volume is comprised of the fundamentals, models, and information technologies (IT) methods and tools for disaster prediction and mitigation. A more detailed list of topics includes mathematical and computational modeling of processes leading to or producing disasters and the modeling of disaster effects, IT means for disaster mitigation, including data mining tools, knowledge-based and expert systems for use in disaster circumstances, GIS-based systems for disaster prevention and mitigation and equipment for disaster-prone areas. A specific type or class of disasters (natural or human-made), however, will not be part of the main focus of this work. Instead, this book was conceived to offer a comprehensive, integrative view on disasters, seeking to determine what various disasters have in common. Because disaster resilience and mitigation involve humans, societies and cultures, not only technologies and economic models, special attention was paid in this volume to gain a comprehensive view on these issues, as a foundation of the IT tool design.

Section 214 of the E-Government Act of 2002 called on the Administrator of the Office of Electronic Government in the Office of Management and Budget, in consultation with the Federal Emergency Management Agency (FEMA), to "ensure that a study is conducted on using information technology to enhance crisis preparedness, response, and consequence management of natural and manmade disasters." The section cited as a goal "to improve how information technology is used in coordinating and facilitating information on disaster preparedness, response, and recovery, while ensuring the availability of such information across multiple access channels." In early 2005, FEMA, via a subcontract through Battelle Memorial Institute, asked the Computer Science and Telecommunications Board (CSTB) of the National Research Council (NRC) to undertake a two-phase study on these issues.

The committee on Using Information Technology to Enhance Disaster Management culminates phase 1 of the project. CSTB established the Committee on Using Information Technology to Enhance Disaster Management, and a public workshop was held under the committee's auspices on June 22-23, 2005. The committee's goal for the workshop was to establish a base of information for its study by hearing about present and future uses of IT from the perspective of federal, state, and local disaster management officials and users together with a sampling of relevant IT research and development activities. A variety of representatives of federal, state, and local government agencies, private industry, and the research community participated. Panelists at the workshop presented a range of views on the present state of the art and practice and future opportunities to harness information technology to aid in the management of natural and human-made disasters. This report summarizes some of the key points made by workshop participants. This report also contains the workshop agenda and includes biographical information for committee members and staff. In phase 2 of its study, the committee will present the inputs received at the workshop with information gathered at several site visits and a series of additional briefings. Phase 2 will culminate in a final report, expected in spring 2006, which provides findings and recommendations on requirements for effective use of information technology for disaster management, research and development needs and opportunities, and related research management and technology transition considerations.

Social science research conducted since the late 1970s has contributed greatly to society's ability to mitigate and adapt to natural, technological, and willful disasters. However, as evidenced by Hurricane Katrina, the Indian Ocean tsunami, the September 11, 2001 terrorist attacks on the United States, and other recent events, hazards and disaster research and its application could be improved greatly. In particular, more studies should be pursued that compare how the characteristics of different types of events—including predictability, forewarning, magnitude, and duration of impact-affect societal vulnerability and response. This book includes more than thirty recommendations for the hazards and disaster community.

A Practical Approach to Improving Disaster Preparedness and Response

Strengthening the Disaster Resilience of the Academic Biomedical Research Community

Fundamental Concepts and Applications

Improving Geospatial Support for Disaster Management

Urban Resilience for Emergency Response and Recovery

Strategies, Opportunities, and Planning for Recovery

Disaster Management and Human Health Risk IV

No person or place is immune from disasters or disaster-related losses. Infectious disease outbreaks, acts of terrorism, social unrest, or financial disasters in addition to natural hazards can all lead to large-scale consequences for the nation and its communities. Communities and the nation thus face difficult fiscal, social, cultural, and environmental choices about the best ways to ensure basic security and quality of life against hazards, deliberate attacks, and disasters. Beyond the unquantifiable costs of injury and loss of life from disasters, statistics for 2011 alone indicate economic damages from natural disasters in the United States exceeded \$55 billion, with 14 events costing more than a billion dollars in damages each. One way to reduce the impacts of disasters on the nation and its communities is to invest in enhancing resilience—the ability to prepare and plan for, absorb, recover from and more successfully adapt to adverse events. Disaster Resilience: A National Imperative addresses the broad issue of increasing the nation's resilience to disasters. This book defines "national resilience," describes the state of knowledge about resilience to hazards and disasters, and frames the main issues related to increasing resilience in the United States. It also provides goals, baseline conditions, or performance metrics for national resilience and outlines additional information, data, gaps, and/or obstacles that need to be addressed to increase the nation's resilience to disasters. Additionally, the book's authoring committee makes recommendations about the necessary approaches to elevate national resilience to disasters in the United States. Enhanced resilience allows better anticipation of disasters and better planning to reduce disaster losses—rather than waiting for an event to occur and paying for it afterward. Disaster Resilience confronts the topic of how to increase the nation's resilience to disasters through a vision of the characteristics of a resilient nation in the year 2030. Increasing disaster resilience is an imperative that requires the collective will of the nation and its communities. Although disasters will continue to occur, actions that move the nation from reactive approaches to disasters to a proactive stance where communities actively engage in enhancing resilience will reduce many of the broad societal and economic burdens that disasters can cause.

Losses of life and property from natural disasters in the United States—and throughout the world—have been enormous and the potential for substantially greater future losses looms. It is clearly in the public interest to reduce these impacts and to encourage the development of communities that are resilient to disasters. This goal can be achieved through wise and sustained efforts involving mitigation, preparedness, response, and recovery. Implementing such efforts, particularly in the face of limited resources and competing priorities, requires accurate information that is presented in a timely and appropriate manner to facilitate informed decisions. Substantial information already exists that could be used to this end, but there are numerous obstacles to accessing this information, and methods for integrating information from a variety of sources for decision-making are presently inadequate. Implementation of an improved national or international network for making better information available in a more timely manner could substantially improve the situation. As noted in the Preface, a federal transition team is considering the issues and needs associated with implementing a global or national disaster information network as described in the report by the Disaster Information Task Force (1997). This National Research Council report was commissioned by the transition team to provide advice on how a disaster information network could best make information available to improve decision making, with the ultimate goal of reducing losses from natural disasters. The report is intended to provide the basis for a better appreciation of which types of data and information should be generated in an information program and how this information could best be disseminated to decision makers. This book introduces the concepts of Resilience-Based Design (RBD) as an extension of Performance-Based Design. It provides readers with a range of cutting-edge methodologies for evaluating resilience and clarifies the difference between resilience, vulnerability and sustainability. Initially, the book focuses on describing the different types of uncertainty that arise in the context of resilience evaluation. This is followed by an entire chapter dedicated to the analytical and experimental recovery functions. Then, starting from the definition of resilience provided by MCEER, an extension of the methodology is provided that introduces the seven dimensions of Community Resilience, summarized in the acronym PEOPLES. They are: Population and Demographics, Environmental/Ecosystem, Organized Governmental Services, Physical Infrastructures, Lifestyle and Community Competence, Economic Development, and Socio-Cultural Capital. For each dimension, components and subcomponents are defined and the related indices are provided. Underlining the importance of the physical infrastructure dimension, the book provides several examples of applications for transportation, hydraulic, gas and power networks. The problem of interdependencies and the domino effect is also taken into account during the analysis. One of the book's closing chapters focuses on different methodologies for improving disaster preparedness and engineering mitigation strategies, while the last chapter describes the different computer platforms available on the market for evaluating Community Resilience. The book offers readers an extensive introduction to the concept of Resilience-Based Design, together with selected advanced applications for specialists. No prerequisite knowledge is needed in order to understand the book, and the Appendix offers valuable supplemental information on e.g. the probabilistic concepts. As such, the book offers a valuable resource for graduate students, young engineers and researchers who are interested in the topic, and can also be used as a supplementary text in graduate level Disaster Resilience courses.

Disaster management is a vibrant and growing field, driven by government spending in the wake of terrorist attacks and environmental debacles, as well as private-sector hiring of risk managers and emergency planners. An ever-increasing number of practicing professionals needs a reference that can provide a solid foundation in ALL major phases of supervision – mitigation, preparedness, response, communications, and recovery. As climate change leads to further costly catastrophes and as countries around the world continue to struggle with terrorism, the demand for solutions will only grow. This revised edition of Coppola's revered resource meets said demand head-on with more focused, current, thoughtfully analyzed, and effective approaches to disaster relief. Expanded coverage of global approaches to disaster management with enhanced data and research on disasters around the world, including Cyclone Nargis, the H1N1 pandemic, and the tsunami in American Samoa More material on risk management, mitigation, myths that affect behavior during crises, and post-disaster evaluation of the response Up-to-date information on the role of aid organizations and international financial institutions like the World Bank in disaster response, as well as commentary on the latest research in disaster management and policy studies

Disaster Management in India: Challenges and Strategies

Disaster Management and Human Health Risk V

Shaping Urban Resilience

Reducing Risk, Improving Outcomes

Disaster Education

Interdisciplinary Perspectives

Disaster Resilience and Sustainability

This book examines the role of the private sector in emergency management and how that role is changing through private sector intersections with government, government agencies, and the public sectors in all phases of emergency management. It particularly focuses on the areas in which government regulations and guidelines promote or encourage private sector involvement, and looks at best practices for public-private partnerships as well as some of the common pitfalls of the contracting model. The private sector now plays a tremendous role in the creation of policies related to emergency management and their implementation at the federal, state, and local levels. The Private Sector's Role in Disasters: Leveraging the Private Sector in Emergency Management explores some of the challenges of implementing policies in the current contracting model. It also compares emergency management to other government services that have been privatized. Case studies of recent disasters and examples of the privatization of some emergency management functions are presented to illustrate how to better plan for private sector involvement in future disasters. Given the sometimes dysfunctional relationships that have emerged from public-private partnerships in disaster situations, it is important to analyze and improve principles and practices to work toward more effective partnership. This book provides thoughtful guidelines, recommendations, and best-practice approaches to public-private development, implementation, and collaboration throughout the disaster cycle. It gives focused

An increasing number of large-scale natural disasters have affected millions of people in recent years. Major earthquakes, floods, and hurricanes, have caused great destruction of property and loss of life, while forest fires, pipeline failures, and bombings have created equally devastating affects on a smaller scale. The increased threats are the topic of the Third International Conference on Disaster Management and Human Health Risk, convened so that experts on public health, security, and disaster management could share information. This book contains the papers presented at the conference. Topics covered include Disaster analysis; Disaster monitoring and mitigation; Emergency preparedness; Risk mitigation; Risk and security; Safety and resilience; Socio-economic issues; Biological threats; Learning from disasters.

This book – "Disaster Management in India: Challenges and Strategies" - provides a practical and realistic understanding of the evolving status of disaster management in India. The book discusses techno-legal systems for disaster management and their real-life effectiveness based upon the author's own professional experience as well as available literature including studies, reviews and audits reports. A case study of the 2001 Bhuj Earthquake conducted by the author is at the nucleus of the book and provides a clear understanding on how interdependent sub-systems (social, organisational, infrastructure) can fail during severe incidents, and the consequences thereof.Lack of resources, lack of coordination, and poor communication are endemic to severely damaged disaster environments like the 2001 Bhuj earthquake and are very commonly seen across the world. What is more important for the future is that new methods are being evolved that overcome the potential risks posed by such initial conditions for improving organizational performance. Lessons from the 2001 Bhuj earthquake highlighted in this book are still relevant and provide directions for well-designed future interventions. The book critically examines performance status of disaster management in the post DM

Act 2005 period and identifies many relevant issues and challenges – including development of effective institutions for disaster risk management.At the end, the book proposes intervention strategies for strengthening and improving disaster management systems keeping in mind the latest developments and best-practices suited to Indian conditions. Drawing on the author's decades of experience both in the domains of disaster management and technology, the book provides tips on - Emergency Operations Center design and development; Media integration into DM, emergency Resources Management systems development and Crowd management.

Natural disasters in recent years have brought the study of disaster resiliency to the forefront. The importance of community preparedness and sustainability has been underscored by such calamities as Hurricane Katrina in 2005 and the Japanese tsunami in 2011. Natural disasters will inevitably continue to occur, but by understanding the concept of resiliency as well as the factors that lead to it, communities can minimize their vulnerabilities and increase their resilience. In this volume, editors Naim Kapucu, Christopher V. Hawkins, and Fernando I. Rivera gather an impressive array of scholars to provide a much needed re-think to the topic disaster resiliency. Previous research on the subject has mainly focused on case studies, but this book offers a more systematic and empirical assessment of resiliency, while at the same time delving into new areas of exploration, including vulnerabilities of mobile home parks, the importance of asset mapping, and the differences between rural and urban locations. Employing a variety of statistical techniques and applying these to disasters in the United States and worldwide, this book examines resiliency through comparative methods which examine public management and policy, community planning and development, and, on the individual level, the ways in which culture, socio-economic status, and social networks contribute to resiliency. The analyses drawn will lead to the development of strategies for community preparation, response, and recovery to natural disasters. Combining the concept of resiliency, the factors that most account for the resiliency of communities, and the various policies and government operations that can be developed to increase the sustainability of communities in face of disasters, the editors and contributors have assembled an essential resource to scholars in emergency planning, management, and policy, as well as upper-level students studying disaster management and policy.

Reducing Disaster Losses Through Better Information

Disaster Management and Human Health Risk III

Quantitative Analysis

Investing in Resilience and Development

A National Imperative

Assessing Hazards, Emergencies and Disaster Impacts

Improving Disaster Management

*Be prepared when disaster strikes with this comprehensive guide to the basics of disaster preparation and response. From the phases of a disaster through all of the elements of an institutional plan to specific events, you'll have the information you need at your fingertips...from a nursing perspective. The book is designed to concentrate in urban areas, the number of people and the value of property affected by disasters, both natural and human-generated, have grown as well. Earthquakes, floods, hurricanes, cyclones, tornadoses, and forest fires have all taken their toll, so have such anthropogenic disasters as pipeline failures, industrial spills, and terrorist attacks. The contents of this volume consist of papers presented at the fourth in a series of conferences convened to assess the potential risk from various disasters and discuss ways to prevent or mitigate damage. The papers have been contributed by experts on public health, security, and disaster management from academia, industry, and government. Topics covered include Disaster Analysis; Disaster Monitoring and Mitigation; Emergency Preparedness; Risk Mitigation; Risk and Security; Safety and Resilience; Socio-economic Issues; Health Risk; Human Factors; Multi-hazard Risk Assessment; Case Studies.*

*Disaster Epidemiology: Methods and Applications applies the core methods of epidemiological research and practice to the assessment of the short- and long-term health effects of disasters. The persistent movement of people and economic development to regions vulnerable to natural disasters, as well as new vulnerabilities related to environmental, technological, and terrorism incidents, means that in spite of large global efforts to reduce the impacts and costs of disasters, average annual expenditures to fund rebuilding from catastrophic losses is rising faster than either population or the gross world product. Improving the resilience of individuals and communities to these natural and technological disasters, climate change, and other natural and manmade stressors is one of the grand challenges of the 21st century. This book provides a guide to disaster epidemiology methods, supported with applications from practice. It helps researchers, public health practitioners, and governmental policy makers to better quantify the impacts of disaster on the health of individuals and communities to enhance resilience to future disasters. Disaster Epidemiology: Methods and Applications explains how public health surveillance, risk assessments, and other epidemiologic studies can be conducted in the post-disaster setting to prevent injury, illness, or death; provide accurate and timely information for decisions makers; and improve prevention and mitigation strategies for future disasters. These methods can also be applied to the study of other types of public health emergencies, such as infectious outbreaks, emerging and re-emerging diseases, and refugee health. This book gives both the public health practitioner and researcher the tools they need to conduct epidemiological studies in a disaster setting and can be used as a reference or as part of a course. Provides a holistic perspective to epidemiology with an integration of academic and practical approaches Showcases the use of hands-on techniques and principles to solve real-world problems Includes contributions from both established and emerging scholars in the field of disaster epidemiology*

*Information technology (IT) has the potential to play a critical role in managing natural and human-made disasters. Damage to communications infrastructure, along with other communications problems exacerbated the difficulties in carrying out response and recovery efforts following Hurricane Katrina. To assist government planning in this area, the Congress, in the Emergency Act of 2002, directed the Federal Emergency Management Agency (FEMA) to request the NRC to conduct a study on the application of IT to disaster management. This report characterizes disaster management providing a framework for considering the range and nature of information and communication needs; presents a vision of the potential for IT to improve disaster management; provides an analysis of structural, organizational, and other non-technical barriers to the acquisition, adoption, and effective use of IT in disaster; and offers an outline of a research program aimed at strengthening IT-enabled capabilities for disaster management.*

Enhancing Disaster Preparedness

Enhancing Disaster and Emergency Preparedness, Response, and Recovery Through Evaluation

Disaster Management

Leveraging the Private Sector in Emergency Management

Improving Disaster Response Collaboration Using Trans-organization Development

Methods and Applications

Healthy, Resilient, and Sustainable Communities After Disasters

Improving Disaster ManagementThe Role of IT in Mitigation, Preparedness, Response, and RecoveryNational Academies Press

Initial priorities for U.S. participation in the International Decade for Natural Disaster Reduction, declared by the United Nations, are contained in this volume. It focuses on seven issues: hazard and risk assessment; awareness and education; mitigation; preparedness for emergency response; recovery and reconstruction; prediction and warning; learning from disasters; and participation in the community. This committee presents its philosophy of calls for broad public and private participation to reduce the toll of disasters.

Offers informatics participation to the subject of disaster risk reduction education and highlights key places of education such as family, community, school, and higher education. This book describes and demonstrates different aspects of education in an easy-to-understand form with academic research and practical field experiences.

Disasters undermine societal well-being, causing loss of lives and damage to social and economic infrastructures. Disaster resilience is central to achieving the 2030 Sustainable Development Goals, especially in regions where extreme inequality combines with the increasing frequency and intensity of natural disasters. Disaster risk reduction and resilience requires participation of wide array of stakeholders ranging from academicians to policy makers to disaster managers. Disaster Resilient Cities: Adaptation for Sustainable Development offers evidence-based, problem-solving techniques from social, natural, engineering and other disciplinary perspectives. It connects data, research, conceptual work with practical cases on disaster risk management, capturing the multi-sectoral aspects of disaster resilience, adaptation strategy and sustainability. The book links disaster risk management with sustainable development under a common umbrella, showing that effective disaster resilience strategies and practices lead to achieving broader sustainable development goals. Provides foundational knowledge on integrated disaster risk reduction and management to show how resilience and its associated concept such as adaptive and transformative strategies can foster sustainable development Brings together disaster risk reduction and resilience scientists, policy-makers and practitioners from different disciplines Case studies on disaster risk management from natural science, social science, engineering and other relevant disciplinary perspectives

Improving Disaster Resilience and Mitigation - IT Means and Tools

Successful Response Starts with a Map

Adaptation for Sustainable Development

Disaster Resiliency

A Disaster Manager's Handbook

Disaster Risk Reduction for Economic Growth and Livelihood

Facing Hazards and Disasters

Enhancing Disaster Preparedness: From Humanitarian Architecture to Community Resilience relates to the fourth priority of the UNDRR 's Sendai Framework for Disaster Risk Reduction 2015-2030. Taking a wide understanding of disaster preparedness, the book deals with resilient responses and building capacities related to hazardous events, bringing some practical experiences and theoretical insights in this regard. Mostly based on field research conducted in the Global South by architects and other built-environment professionals, the book covers both post-disaster interventions (rebuilding and recovery) and development-related processes. Its three parts address the interlinkages between humanitarian design, community resilience, and inclusive governance, which are crucial for fostering effective disaster preparedness. Part I discusses the changing roles of architects and urban designers involved in the humanitarian sphere. Part II concentrates on resilience as a socioecological capacity to enhance preparedness within community-based spatial processes. Focused on global dynamics, Part III covers topics emphasizing the link between the management of crises, whether political or economic, at different levels of governance, and the vulnerability of communities and structures on the national and local scales. As such, the book approaches rising global priorities and brings timely lessons to support building a more equitable, safe, and resilient environment in a rapidly urbanized world. Explores Sendai' s fourth priority through a spatial lens Examines the role of humanitarian design in building resilience Critically revisits concepts such as incremental housing and building back better Provides examples of methodological tools for community engagement in resilience-building processes

Over the past few years the anticipation of natural disasters, such as Hurricane Katrina in 2005, which have severely tested and in many cases overwhelmed responding agencies, in all aspects of emergency management, geospatial data and tools have the potential to help save lives, limit damage, and reduce the costs of dealing with emergencies. Great strides have been made in the past four decades in the development of geospatial data and tools that describe locations of objects on the Earth's surface and make it possible for anyone with access to the Internet to witness the magnitude of a disaster. However, the effectiveness of any technology is as much about the human systems in which it is embedded as about the technology itself. Successful Response Starts with a Map assesses the status of the use of geospatial data, tools, and infrastructure in disaster management, and recommends ways to increase and improve their use. This book explores emergency planning and response; how geospatial data and tools are currently being used in this field; the current policies that govern their use; various issues related to data accessibility and security; training; and funding. Successful Response Starts with a Map recommends significant investments be made in training of personnel, coordination among agencies, sharing of data and tools, planning and preparedness, and the tools themselves.

The prevalence of natural disasters in recent years has highlighted the importance of preparing adequately for disasters and dealing efficiently with their consequences. This book addresses how countries can enhance their resilience against natural disasters and move towards economic growth and sustainable development. Covering a wide range of issues, it shows how well thought-out measures can be applied to minimize the impacts of disasters in a variety of situations. Starting with the need for coping with a rapidly changing global environment, the book goes on to demonstrate ways to strengthen awareness of the effectiveness of preventive measures, including in the reconstruction phase. The book also covers the roles played by different actors as well as tools and technologies for improved disaster risk reduction. It focuses on a variety of case studies from across Asia, Africa and Latin America, drawing out lessons that can be applied internationally. This book will be of great interest to professionals in disaster management, including national governments, donors, communities/citizens, NGOs and private sector. It will also be a highly valuable resource for students and researchers in disaster management and policy, development studies and economics.

This dissertation primarily uses observations made during the 2005 Kashmir earthquake relief effort and available disaster literature to address problems that impede effective and efficient disaster preparedness and response. Three manuscripts form the body of the dissertation. The manuscripts are thematically linked through the Emergency Management Cycle. Each manuscript examines actual problems and provides recommended solutions to these problems along with a strategy to implement them. The first manuscript proposes a practical method whereby emergency managers can assess risk in their community and examines the use of schools as the basis of a community-wide relief center plan. The second manuscript draws on observations from the 2005 Kashmir earthquake and provides recommendations to operational geo-information utilization during that relief effort. The manuscript concludes with recommendations on how to increase the accessibility of geo-information to a diverse group of users and better manage geo-information during future disaster response efforts. The last manuscript supplements the study of civil-military relief efforts with contemporary anecdotal experience. The research examines the interaction between US military forces and other disaster relief actors during the 2005 Kashmir earthquake relief effort. The manuscript puts forth the Kashmir Model of integration, coordination, and transparency of intent as a framework in which future humanitarian assistance operations can be successfully executed.

Approaches to Managing Disaster

Improving the Nation's Response to Catastrophic Disasters : Report to Congressional Researchers

A Safer Future

The Role of Nurses in Disaster Management in Asia Pacific

Practitioner's Hands and Academic Eyes

Protecting the Nation's Investment

Disaster Epidemiology

Facing the Unexpected presents the wealth of information derived from disasters around the world over the past 25 years. The authors explore how these findings can improve disaster programs, identify remaining research needs, and discuss disaster within the broader context of sustainable development. How do different people think a likely to panic or to respond with altruism? Why are 110 people killed in a Yajujir crash considered disaster victims while the 20,000 killed annually in traffic accidents in the U.S. are not? At the crossroads of social, cultural, and economic factors, this book examines these and other compelling questions. The authors review the influences of government and disaster planning on disaster response, and the involvement of professionalism in the field. They also compare technological versus natural disaster and examine the impact of technology on disaster programs.

This book analyzes recent advances, trends, challenges and potentials of the role of media in disaster risk reduction. Collaboration, co-design and co-delivery with other stakeholders in science, technology, private sectors, and civil society are found to be effective in reaching people and communities. The media is considered to be of utmost importance in disaster risk reduction. The book identifies the role of media in disaster risk reduction. Media literacy has become an important issue for several stakeholders, including governments. In addition, more focus is placed on media governance to look at the priorities of disaster risk reduction initiatives within the media. All of these are the key. These necessitate a resilient media infrastructure as the core of uninterrupted coverage. Media literacy has become an important issue for several stakeholders, including governments. 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functionality after a crisis. Increasing evidence indicates that collaboration between the private and public sectors could improve the ability of a community to prepare for, respond to, and recover from disasters. Several previous National Research Council reports have identified specific examples of the private and public sectors working on building codes, retrofitting buildings, improving community education, or issuing extreme-weather warnings. State and federal governments have acknowledged the importance of collaboration between private and public organizations to develop planning for disaster preparedness and response. Despite growing ad hoc experience across the private-public collaboration focused on disaster preparedness, response, and recovery. Building Community Disaster Resilience through Private-Public Collaboration assesses the current state of private-public sector collaboration dedicated to strengthening community resilience. Identifies gaps in knowledge and practice, and recommends research goals, and practices.

Disaster Preparedness and Management

Facing the Unexpected

Disaster Management and Human Health Risk VII

Understanding Human Dimensions

Reducing the Impacts of Natural Disasters

Disaster Preparedness and Response in the United States

Disaster Resilience

Special needs populations are often neglected or forgotten in disaster preparedness. Post-disaster research has found that approximately 80% of emergency management agencies that experienced a disaster did not have disaster preparedness plans in place for special needs population. In the past, researchers have reviewed the lack of disaster preparedness for special needs populations in a post-disaster setting; little pre-disaster research has been done to identify what could improve disaster preparedness for special needs populations. This research surveyed Emergency Managers, the primary person within an agency responsible for mitigation, preparedness, response, and recovery from natural and manmade incidents. An Exploratory Factor Analysis was used to reveal correlations between the Emergency Managers' disaster preparedness for special needs populations and the variables of education, training, and on-the-job experience. This study searched for correlations that imply greater levels of preparedness for special needs population based on those variables. Data analysis identified that the main variables had moderate to no correlation of significance. Two sub-variables (National Incident Management System training and hours per week worked in emergency management) provided significant correlations to improved disaster preparedness for special needs populations. In order to provide correlations, the data collected evaluated the level preparedness based on FEMA guidance. This research provided detailed results of disaster preparedness for special needs populations based on the actions taken (and not taken) by the Emergency Manager. In some areas, Emergency Managers are remarkably prepared, while in other areas there is still much to be done.

This book documents how nurses have shown their dedication, courage, expertise and compassion in helping communities prepare for, respond to and recover from disastrous events. It aims to inspire and equip nurses and other health professionals to help people in disaster-affected areas and contribute to community resilience. The last decade (2005-2015) has been characterized by a number of overwhelming natural disasters - tropical storms, floods, earthquakes, tsunamis, and threats of emerging infectious diseases - SARS, MERS-CoV and Ebola around the world. Countries from the Asia Pacific region, such as Australia, Cambodia, China, Indonesia, India, Japan, Nepal, Philippines, Solomon Islands, South Korea, Thailand and Vanuatu, have borne the brunt of the devastation caused by these catastrophic events. Nurses from these countries have stepped in providing emergency care in hospitals and in the field, addressing public health needs in evacuation centers, supporting epidemiologic surveillance and conducting health education, training and research, to help save lives and support communities build back better.

New Directions for Evaluation. |