DISASTER AND VULNERABLE POPULATIONS

By: Heng-Min Chien

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CONNEXIONS

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1. Introduction to Hazards and Disasters Around the World¹

Objectives:

To understand course boundaries and performance expectations

To gain initial understanding of hazards and disasters

We review the syllabus and expectations for this course. Particular attention is paid to the criteria used to monitor learning. I define hazards and disasters, talk about different types of disasters, introduce phases of disaster management, describe the role of social work in disaster historically and open the question of social work's future potential in disaster.

 $^{^{1}}$ This content is available online at <http://cnx.org/content/m40277/1.2/>.

2. Vulnerability and Risk Assessments¹

Objectives:

To become acquainted with high risk and special populations in disaster management

To raise awareness of diversity issues in disaster management

We learn why vulnerability matters in disaster management and gain an overview of the different schools of thought that have formed the field of disaster management. We consider the definition, scope, and measurement of hazards risk and pay particular attention to high risk and special populations, including displaced people (refugees), ethnic minorities, economically disadvantaged populations, children, and the elderly.

2.1 Example 1

2.1.1 Linda Davis

Description of Principle: "The patterns of everyday life put certain people at greater risk from disasters than others" (Gillespie, 2010, p. 3)

Justification: This principal is exceedingly important because only when we understand what puts individuals and groups at risk during a disaster can we begin to find ways to reduce the risk and prepare an appropriate disaster response. For example, "in disasters, low-income households are highly vulnerable because of less insurance protection, older housing, and fewer material resources for recovery" (Zakour & Harrel, 2003, p. 28). By having an understanding of the various risks, social workers and others involved in disaster management can focus their efforts on minimizing the risks and providing resources for those most directly affected by the disaster. Likewise, understanding about vulnerability "increases the capacities of responders by delegating authority to the local level, avoiding overly stringent bureaucratic operating procedures, encouraging self-reliance among the affected population, improving decision making in crisis situations, and discouraging the creation of dependency through well-intentioned but sometimes counterproductive relief operations" (McEntire, 2004, p. 27).

Social Work Relevance: Part of the work of social workers is serving those who are most vulnerable within our community. This professional emphasis must extend to the area of disaster management. The social work profession is "committed to serving vulnerable populations at risk for social and economic disadvantage, including exposure to hazards in the social and physical environment" (Zakour & Harrel, 2003, p. 28). Discovering the patterns of vulnerability helps social workers be better prepared for their jobs, because "social workers who understand those patterns are better able to direct and manage scarce resources" (Gillespie, 2010, p. 3).

Related Definitions:

 $^{^{1}\}mathrm{This}\ \mathrm{content}\ \mathrm{is}\ \mathrm{available}\ \mathrm{online}\ \mathrm{at}\ \mathrm{<http://cnx.org/content/m40282/1.2/>}.$

<u>Vulnerability</u>: the degree of internal risk in a society in relation to the level of resilience of those societies or communities in danger (Zakour, 2010, p. 16)

<u>Distributive Justice:</u> the condition in which all populations in a community, and all communities in a society, have equal access to resources and capacity needed for overall well-being and resilience in the face of adversity (Zakour, 2010, p. 17)

Physical environment: the natural, built, or technological environment (Zakour, 2010, p. 17)

<u>Social environment:</u> the social organization of a community or society, with an emphasis on the psychological and cultural characteristics of a social organization (Zakour, 2010, p. 17)

Risk: the effects of environmental liabilities on the physical structures and assets of a community (Zakour, 2010, p. 18)

Resilience: the ability of a social system such as a society, community, group, or household to recover or bounce back after a disaster (Zakour, 2010, p. 18)

Illustrations:

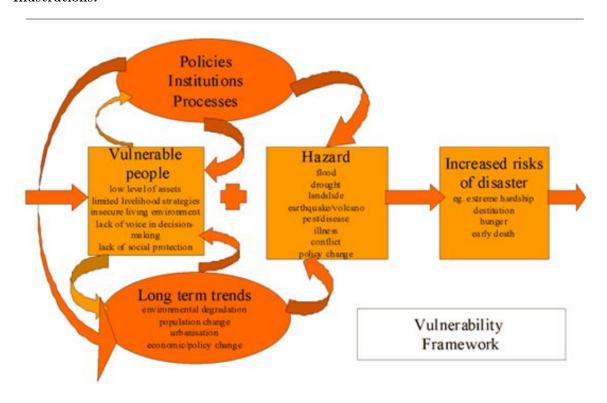


Figure 2.1

This diagram shows how a vulnerable population, such as one who has a low level of assets, can have an increased risk when it is presented with a disaster. Policies, Institutions and Processes, as well as long term trends, can either increase or decrease a groups' vulnerability.

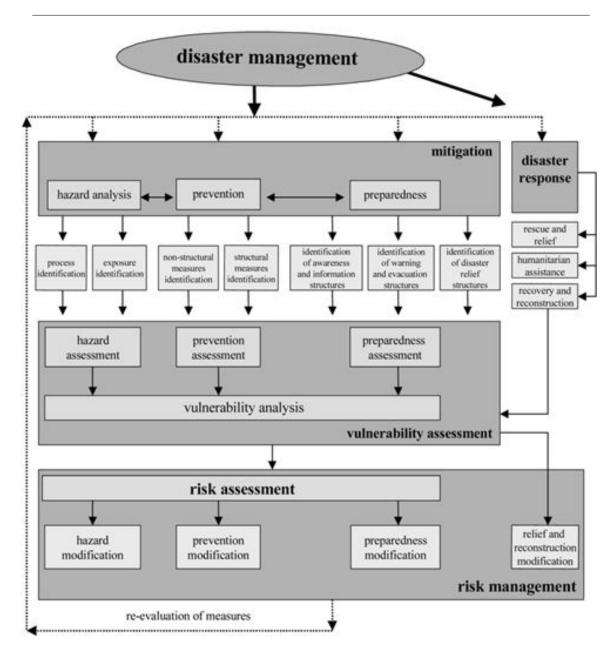


Figure 2.2

This model shows how a risk assessment and vulnerability analysis can be used to help mitigate and respond to a disaster.

2.2 Example 2

2.2.1 Brodie Mueller

Principle: Vulnerability is the product of many variables. (McEntire (2004). Tenets of vulnerability: An assessment of a fundamental disaster concept. Journal of Emergency Management 2 (2), Pp. 23-29. (pg 24)

Justification: If we could pin vulnerability down to one thing, like location or government structure, we could fix it easily and therefore prevent many more disasters to vulnerable populations. However, each community and each family in those communities have their own unique sets of vulnerabilities.

Social Work Relevance: This is important to social work for many reasons. First, we need to be sensitive to the fact that many families may have many conditions that make them vulnerable, and may not be aware of all of them. Because of this, we as social workers need to look at each situation and see the family in their environment with its hazards. We also need to be understanding and teach people about their hazards, as they may not know they are vulnerable, and educate them on how to be safer.

Definition: Vulnerability - Ratio of risk to susceptibility. (Gillespie (2010). Vulnerability: The central concept of disaster curriculum. Disaster Concepts and Issues. Pp. 3)

Illustration:

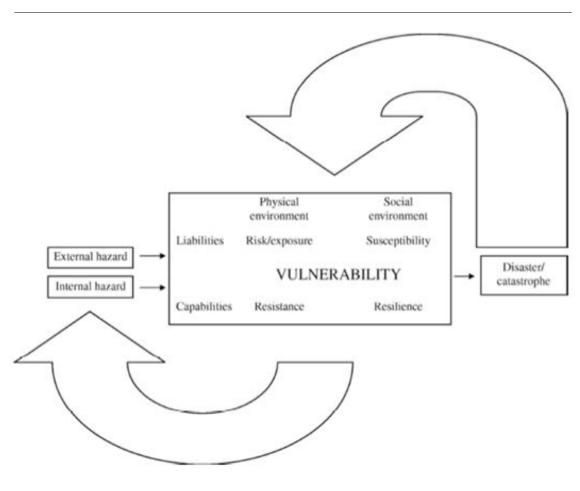


Figure 2.3

3. Sustainable Hazards Mitigation¹

Objectives:

To know the techniques, tools, and issues of mitigation

To learn about influences on the adoption and implementation of mitigation

We examine influences on the adoption and implementation of building codes and standards, retrofitting, land use planning and management, insurance, and prediction/forecasting/warnings.

3.1 Example 1

3.1.1 Linda Davis

Description of Principle: "Decisions must be made about how to help the most vulnerable, while keeping an open and constructive dialogue going about which agency (the government, NGOs, private sector, etc.) should eventually shoulder the burdens of basic public welfare." (Christoplos, Mitchell, & Liljelund, 2001, p. 192)

Justification: Gaining the involvement of all sectors, both public and private, is critically to preparing for a disaster. As noted in an article by Godschalk, Brody, & Burby (2003), "a sustainable community selects mitigation strategies that evolve from full participation among all public and private stakeholders. The participatory process itself may be as important as the outcome" (p. 733). The dialogue is critical among these sectors, because misunderstanding about who is responsible for what can create gaps in disaster management coverage and greatly impact the lives of those affected by the disaster.

Social Work Relevance: As part of the Social Work Code of Ethics, it is the responsibility of social workers to be involved in multiple sectors (political, NGOs, private businesses, communities, etc.) in order to best meet our client's needs. The same can be said for social workers involved in disaster management. The challenge of social workers is "to see how a concern for risk fits into the values, incentives, theories and interests which form the cognitive structures by which key actors—be they villagers, politicians, NGO volunteers, scientists or insurance salesmen—construct their own policy narratives" (Christoplos, Mitchell & Liljelund, 2001, p. 196). Known for its holistic view, the social work profession is in the perfect position to both build public awareness and build the political will to create sustainable policies for mitigation.

Related Definitions:

Mitigation: minimizing the destructive effects of disasters (Christoplos, Mitchell & Liljelund, 2001, p. 186)

<u>Preparedness</u>: ensuring the readiness of a society to forecast, take precautionary measures and respond to an impending disaster (Christoplos, Mitchell & Liljelund, 2001, p. 186)

Actors in Mitigation:

¹This content is available online at http://cnx.org/content/m40297/1.2/.

Non-government organizations (NGOs): involved during disaster, but their involvement "varies according to internal factors, such as the links between relief and development departments, and external factors, such as donor priorities and the contested roles of state and civil society in highlighting and managing risk (Christoplos, Mitchell & Liljelund, 2001, p. 186)

Multilateral and Bilateral Development Institutions: interested in incorporating disaster mitigation into development practices

Scientific community: use scientific knowledge to help predict and prevent disasters

Private sector: involved in disasters through insurance industry and provision of resources

Governments and Local Institutions: responsible for the safety of their citizens and communities and therefore should have a key role in mitigation and preparedness (Christoplos, Mitchell, & Liljelund, 2001)

Illustrations:



Figure 3.1

This illustration demonstrates the absurdity of assuming that just because people aren't thinking about or preparing for dangers means they aren't going to happen. All aspects of society need to consider disaster mitigation and preparedness in order to alleviate some of the risk.

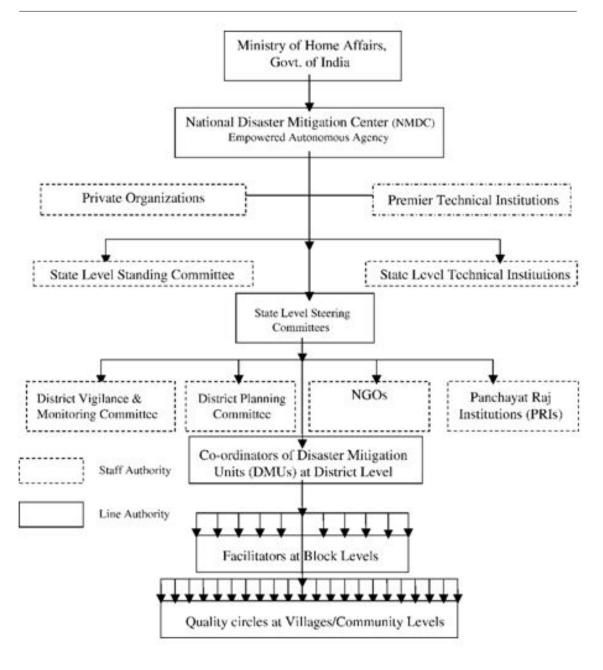


Figure 3.2

This diagram shows the interactions between various levels of society (in this case in India) and how each level needs to have a defined and understood role in disaster mitigation and preparedness.

3.2 Example 2

3.2.1 Brodie Mueller

Principle - Livelihood strategies help to keep people alive and should be used when talking about mitigation. (Christoplos, I., Mitchell, J., & Liljelund, A. (2001) Re-framing risk: The changing context of disaster mitigation and preparedness. Disasters 25(3), Pp.185-198.)

Justification: The authors talk about the different discourses that are being held around risk. The most interesting one I thought was the efforts to understand how poor people are not just pawns in the risk mitigation plan, but can be used as real players in their neighborhoods. He suggests that people in poverty have a livelihood strategy that is more "often about addressing vulnerability and handling shocks as opposed to making plans to get out of poverty." In other words, people in poverty are just surviving, living from day to day, and learning how to handle different "shocks" where they are most vulnerable.

Social Work Relevance: I think that we do this as social workers some times. We forget that everyone has their own strategy for mitigating risk and becoming less vulnerable. Some call them coping mechanisms, but in the end these are the rules we all make for ourselves to help us survive. Therefore, when assisting disaster victims who are in poverty, we need to as ourselves "Why are they doing this like that?", but in a different way than normal. Ask it in a way to find their strengths, and understand their own mitigation strategy.

Definitions: Mitigation: Minimizing the destructive effects of disaster (pg 186). Livelihood Strategy: The day to day strategies one uses to survive poverty, trauma or other emergencies. (pg 190-191)

Illustration:



Figure 3.3: Farming and agriculture is a means of life for many people, and can support economic development after a disaster.

4. International, Government, Private Sector Roles & Responsibilities¹

Objectives:

To know roles and responsibilities of the main actors in emergency management

To understand different approaches to emergency management

We map out the primary roles and responsibilities of the main actors in emergency management. We compare the command and control approach to the involvement and empowerment approach of emergency management.

4.1 Example 1

4.1.1 Jessica Porter

Principle:

Disaster mitigation, management and recovery should be an important practice for local, national and international governments.

Key Terms:

- Homeland Security Department model: is the mitigation of hazards or the effectiveness of post-disaster.
- Local Chief Executive Officer (mayor or city/county manager): Coordinate local resources; change
 local laws and ordinances, such as direct evacuation; Assist people, businesses, and organizations and
 request state and federal aid.

Reading Quotes:

- "A concerted national effort to prevent terrorist attacks within the United States; reduce America's vulnerability to terrorism, major disaster, and other emergencies; and minimizes the damage and recover from attacks, major disasters, and other emergencies that occur" (The National Response Plan, 2004, pg. 1)
- The National Incident Management System (NIMS) "provides a nationwide template enabling Federal, State, local and tribal governments and private-sector and nongovernmental organizations to work together effectively and efficiently to prevent, prepare for, respond to, and recover from domestic incidents regardless of cause, size or complexity" (The National Response Plan, 2004, pg. 1).

Justification of Principle:

 $^{^{1}}$ This content is available online at <http://cnx.org/content/m40300/1.2/>.

No single agency or administrative branch by itself has the ability to put together a comprehensive disaster plan. Each affected area or service must have a disaster management plan that has been carefully planned, updated and put into action before a disaster strikes.

Relevance to Social Work:

As a social worker in an agency or government system we stand as advocates for vulnerable single families or a population and we have to be their voice when they do not know the words to say or have the ability to be involved in the disaster planning process. Social workers have the knowledge and population perspectives to be involved in the process disaster planning and help coordinate efforts along with government systems.

Illustrations:



Figure 4.1

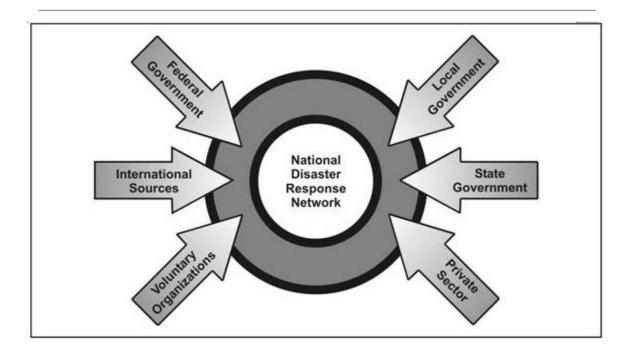


Figure 4.2: Everyone works together to form a disaster plan

4.2 Example 2

4.2.1 Linda Davis

Description of Principle: "Everything is interconnected and a holistic, integrated approach is required" (McEntire, 2005, p. 206)

Justification: Looking at the numerous stakeholders involved in disaster management, it is not enough for just one to take charge of the whole disaster situation. All stakeholders need to be involved in the planning process. As noted in an article by Pearce (2003), "community members are becoming increasingly frustrated not only with being excluded from the decision-making processes involved in community planning, but also with being excluded from those involved in disaster management planning" (p. 212). The process of disaster planning must be a combination of top-down and bottom-up approaches, because what affects the government affects the community and vis-versa. Likewise, what affects the community affects the private sectors and what affects the private sector affects the government also. There exists an interconnected web of players in disaster management. It is critical to know who plays what role and keep everyone involved in the process.

Social Work Relevance: Social workers are ideal candidates to help build communication bridges between the local community and the government plans/policies. Social workers are trained to "listen to the community- let them define what they believe are the most important problems, mobilize all members of a community creatively, coordinate efforts at a regional level, raise public awareness of the importance of managing risk, and ensure that powerful interest groups support the community efforts" (Pearce, 2003, p. 215). Social workers can help others

see the points of intersections between the government, communities, private sector and larger world.

Related Definitions:

National Response Plan (NRP): a concerted national effort to prevent terrorist attacks within the United States; reduce America's vulnerability to terrorism, major disasters, and other emergencies; and minimize the damage and recover from attacks, major disasters, and other emergencies that occur (Department of Homeland Security, 2004, p.1)

National Incident Management System (NIMS): a plan that provides a nationwide template enabling Federal, State, local and tribal governments and private-sector and nongovernmental organizations to work together effectively and efficiently to prevent, prepare for, respond to, and recover from domestic incidents regardless of cause, size or complexity." (Department of Homeland Security, 2004, p.1)

Homeland Security Presidential Directive- 5 (HSPD-5): policy that helped to establish clear objectives for a concerted national effort to manage domestic emergency incidents (Department of Homeland Security, 2004, p.1)

Emergency Support Functions (ESF): a grouping of government and certain private-sector capabilities into an organization structure to provide, support, resources, and services. The American Red Cross serves as an ESF primary agency which provides mass care resources (Department of Homeland Security, 2004, p.11)

<u>Comprehensive Emergency Management (CEM):</u> measures adopted by the U.S. in 1970 to ensure that every agency worked to mitigate, prepare for, respond to, and recover from any disaster that might occur (McEntire, 2005, p. 208)

Integrated Emergency Management (IEM): the implementation of CEM through assessing risks, assessing capabilities, and working to close the gap between them (McEntire, 2005, p. 208)

Illustrations:



Figure 4.3

This picture depicts the sense of interconnectedness that exists in disasters. Because many stakeholders are interconnected, disaster management must demonstrate a similar holistic approach.

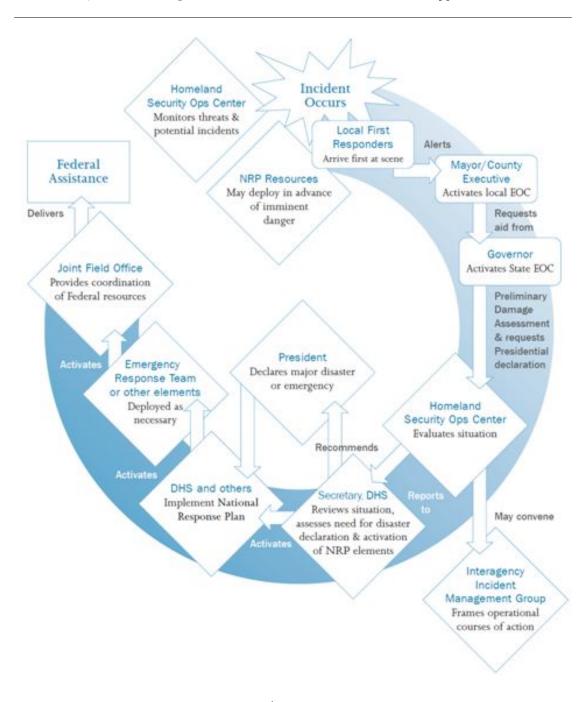


Figure 4.4

This diagram shows some of the ways the local communities are connected with the federal government

in disaster situations.

5. Disaster Planning¹

Objectives:

To know the components and steps of community disaster planning

To understand the strategies of planning, legal considerations, and issues of risk communication

We discuss plans versus the planning process, disaster planning myths, and features of planning, including agenda control, coalitions, cooptation, media relationships, constituency support, liability, and risk communication.

5.1 Example 1

5.1.1 Linda Marvis

Description of Principle: "The ignorance of appropriate planning principles is just as dangerous to effective outcomes as inaccurate knowledge of the threat, lack of necessary protective equipment or failure of the jurisdiction to allocate resources to emergency preparedness and response" (Perry & Lindell, 2003, p. 348)

Justification: While most people assume that disaster planning requires simply knowing about the threat of danger, having the equipment necessary to address it and knowing who and what is available to meet the need, the very process of disaster planning requires intentionality. Planners must be willing and able to look at complex systems (possibly using system dynamics models). They must also address common myths about disasters that may become barriers in implementation. Yet the plans must also be simple, flexible and practiced enough to be useable. If good planning practices are not utilized, the plan cannot be used as "as a device for training personnel to understand how their role fits into the overall emergency response and consequently makes it more difficult to implement the plan effectively when the need arises" (Perry & Lindell, 2003, p. 343).

Social Work Relevance: It is not enough to simply have enough resources on hand for a disaster. Social workers must help put plans into place that are comprehensive and flexible. Social workers can especially be helpful towards initiating functional exercises for disaster planning within their communities. As noted by Peterson & Perry (1999) "each component is critically connect to the others such that a failure in a single link can hamper the achievement of jurisdictional preparedness" (254). In order to achieve effective outcomes, social workers must have knowledge of good planning principles and use effective communication to convey those plans to others.

Related Definitions:

Emergency preparedness: the readiness of a political jurisdiction to react constructively to threats from the environment in a way that minimizes the negative consequences of impact for the health and safety of

¹This content is available online at http://cnx.org/content/m40292/1.2/.

individuals and the integrity and functioning of physical structures and systems (Perry & Lindell, 2003, p. 338)

<u>Hazard assessment:</u> both identifying threats that have previously affected the community and employing technology that leads to prompt identification of new or potential threats (Perry & Lindell, 2003, p. 339)

Risk reduction: an examination of the actions necessary to decrease the detected or projected levels of danger and to identify the resources required for implementing those actions (Perry & Lindell, 2003, p. 339)

<u>Functional exercise</u>: where a disaster management team selects one or a small number of functions under a disaster response plan and conducts a test. For example, testing the EMS or Law Enforcement segments (Peterson & Perry, 1999, p. 244)

Illustrations:



Figure 5.1

This illustration shows that just having a plan is not sufficient. It must be an intentional plan that is well thought-out, communicated, and practiced.

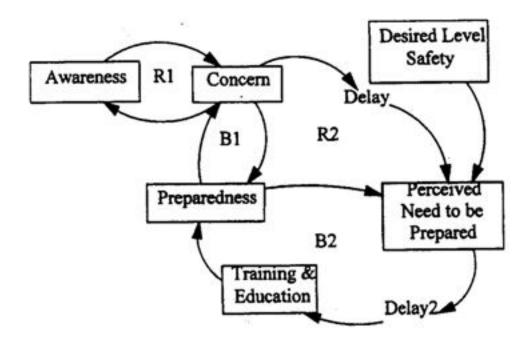


Figure 5.2

This stock and flow model demonstrates the complexity of systems involved in disaster planning. Disaster planners need to be aware that training and education are not enough. They also need to be concerned with the community's awareness of and concern about disaster, as well as whether the community feels the need to be prepared.

5.2 Example 2

5.2.1 Brodie Mueller

Principle: Disaster planning is always a fluid activity and is only truly tested in he face of disaster (Perry and Lindell (2003). Preparedness for Emergency Response: Guidelines for the Emergency Planning Process. Disasters 27 (4), Pp. 347).

Justification: All the best intentions and best laid plans can seem like good planning, but if that plan will not adapt to the ever changing nature of disaster, then it will fail. It is important to test plans in the face of disaster and to allow for hanges because disasters will not always fit to the plans we make.

Social Work Relevance: Social workers are trained to meet people where they are at, and like disasters and disaster plans, peoples' response to disasters will be fluid. We need to be able to flow with people in their response to disasters and to their plans. While it is important for families to make disaster plans, we need to help them understand the fluid nature of disaster, and help to make their plans malleable and adaptable to the situation.

Definition: Disaster Plan: Set of activities and tasks that are set in motion once an area is affected by a disaster with the goal of limiting destruction of property and loss of life.

Illustration



Figure 5.3: Drills and tests are important to help prepare a disaster plan.

6. Coordination of Community Resources¹

Objectives:

To understand key features of intergovernmental relations, mutual aid agreements, and community networks

To appreciate the importance of coordination in mobilizing resources

Coordination is critical during all four phases of emergency management and the more complex the community the more important coordination becomes. We define coordination and distinguish it from integration. Various forms of coordination are considered.

6.1 Example 1

6.1.1 Linda Davis

Description of Principle: "The more complex the community, the more important it is to establish coordination" (Danso & Gillespie, 2010, p. 113).

Justification: In today's globalized world, well-coordinated efforts are critical in disaster management. While many well-established and efficient organizations exist, "no single organization is capable of successfully handling today's global problems such as natural disasters" (Danso & Gillespie, 2010, p. 115). By coordinating and sharing knowledge and resources, organizations involved in disaster management can serve their communities with more efficiency and provide higher quality services.

Social Work Relevance: Coordination is important in all aspects of social work, but especially in disaster response and disaster recovery situations. In a world of complex disasters, the social worker must "be sensitive to the obstacles of coordination and how to overcome them" (Danso & Gillespie, 2010, p. 115). Social workers must help successfully manage the community's resources, such as information, people, money, physical space and equipment. Social workers who promote and maintain a high level of coordination within their communities "are more likely to help their communities achieve effective disaster management systems" (Danso & Gillespie, 2010, p. 115).

Related Definitions:

<u>Coordination</u>: the cooperation of independent unites for the purpose of eliminating fragmentation, gaps in service delivery, and unnecessary duplication of services (Danso & Gillespie, 2010, p. 119)

Coordinated Assistance Network (CAN): a Network of people, information and tools designed

to facilitate year-round collaboration across agencies supporting client and resource management for large-scale disaster recovery events (Coordinated Assistance Network, n.d., p. 1)

 $^{^{1}} This\ content\ is\ available\ online\ at\ < http://cnx.org/content/m40304/1.2/>.$

St. Louis Area Regional Response System (STARRS): a coordinated regional response to large-scale critical incidents in the bi-state region surrounding St. Louis (St. Louis Area Regional Response System, n.d., p. 1)

Emergency Patient Tracking System (EPTS): a wireless triage system provides area hospitals, health departments, Missouri National Guard and Missouri State Emergency Management

Agency with instant, interoperable, reliable and secure communications in times of need (St. Louis Area Regional Response System, n.d., p. 1)

Emergency Management Assistance Compact (EMAC): a congressionally ratified organization that provides form and structure to interstate mutual aid (National Emergency Management Association, 2009, p. 1)

National Voluntary Organizations Active in Disasters (NVOAD): the forum where organizations share knowledge and resources throughout the disaster cycle—preparation, response and recovery—to help disaster survivors and their communities (NVOAD, 2011, pp.1)

Illustrations:

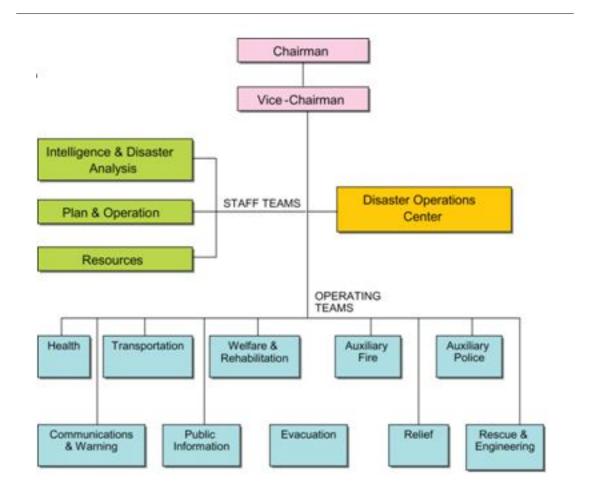


Figure 6.1

This diagram shows the typical structure of a disaster coordination council.

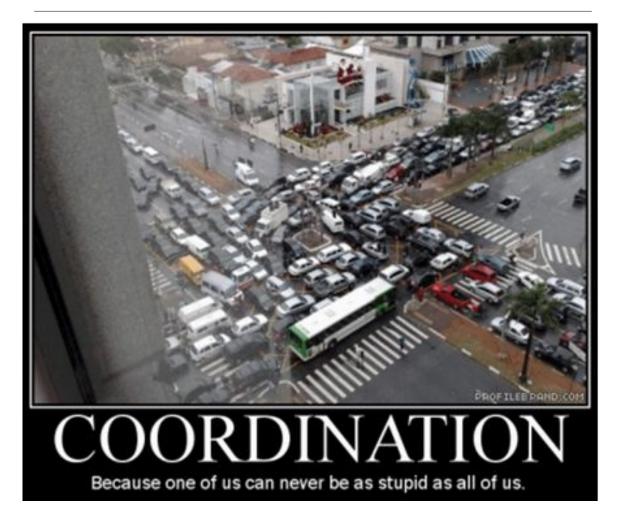


Figure 6.2

This picture illustrates how if people aren't working with each other, they can often end up impeding each other. The same is true for organizations.

6.2 Example 2

6.2.1 Brodie Mueller

Principle: Coordination is the most effective way to respond to a disaster.(Danso & Gillespie (2010). Coordination: A key community resource in disasters. Disaster Concepts and Issues. Pp. 113-131.)

Justification: No agency is an island, and no agency can do everything on their own. Therefore, we need to be collaborating with other agencies to provide timely and appropriate response to a disaster. It is also important that collaborators have the same vision and are not competing to provide the most services or save the most money.

Social Work Relevance: Social workers are good at collaborating with others and understand that people have many different influences and sources of support. We then need to keep our collaborations in mind when responding to a disaster and have the largest, most effective response. Likewise, we can use people's own collaborations to find their strengths and use them for an individualized response.

Definition: Coordination - An agreed-on relationship between independent organizations to work for hazard mitigation, disaster preparedness, response and recovery. (Danso and Gillespie, 2010, p 113)

Illustration:

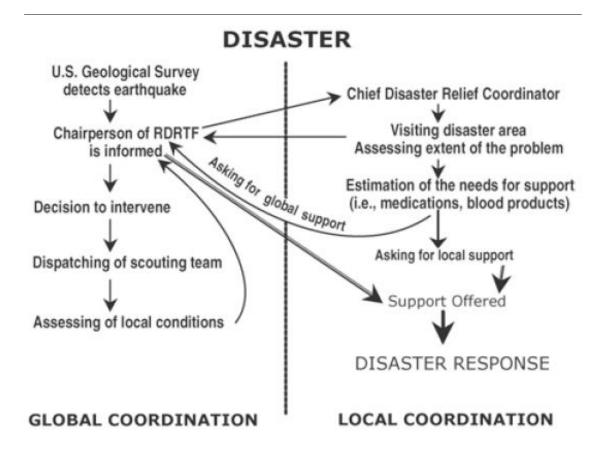


Figure 6.3

7. Disaster Preparednes¹

Objectives:

To know the elements and processes of disaster preparedness

To appreciate the strategic role of disaster preparedness in reducing the number of injuries and loss of life from disasters

We examine the principal facets of preparedness, including hazards awareness, education, training, exercises, and skill building. We discuss social factors constraining hazard perceptions such as lack of awareness, underestimation of risk, reliance on technology, fatalism and denial, and social pressures. We talk about causes of public and government apathy and consider strategies for reducing apathy.

7.1 Example 1

7.1.1 Linda Davis

Description of Principle: "Family, community and self-learning, coupled with school education can bring a person in the gradual path of knowledge to perception to code of conduct" (Shaw et. al., 2004, p. 46)

Justification: In order for people to comprehend the importance of disaster preparedness and to value it enough to actually act according to the disaster "code of conduct," disaster management specialists must be willing to communicate with people on a variety of levels. School education is an important first step in preparing for disasters, but community and family education, as well as modeling self-learning, must be promoted. This type of preparedness "has a preventative focus, as timely proactive efforts can save lives, minimize property damages, and save millions of dollars annually which are now spent on disaster recovery" (Banerjee & Gillespie, 1994, p. 138).

Social Work Relevance: Social workers have the ability to help coordinate community and family education regarding disaster preparedness. They can also ensure that their individual agencies and people within that agency are prepared for potential disasters. In their work, they can adopt strategies that "mirror the developmental process described here: motivating people to prepare (precursor variables), facilitating the formation of intentions (intentions formation variables), and then promoting the conversion of intentions to preparedness (moderator variables)" (Paton, Smith, & Johnston, 2005, p. 5). By practicing, assessing and enhancing their own preparedness levels, as well as working with the Red Cross to "create, maintain, and increase inter-organization coordination for disaster response," social works will "not only increase their own organizational disaster response effectiveness, but will also contribute to the more essential larger community preparedness effort" (Banerjee & Gillespie, 1994, p. 139).

Related Definitions:

<u>Preparedness:</u> the degree of readiness to deliver services in response to a disaster (Banerjee & Gillespie, 1994, p. 131)

¹This content is available online at http://cnx.org/content/m40311/1.2/.

Adjustment: all those intentional actions which are taken to cope with risk and uncertainty of natural events (Banerjee & Gillespie, 1994, p. 132).

<u>Readiness:</u> an overall judgment concerning the probability that the organization could successfully perform some specified task if asked to do so (Banerjee & Gillespie, 1994, p. 132)

Critical Awareness: the extent to which people think and talk about a hazard (Paton, Smith, & Johnston, 2000, p. 1)

Outcome expectancy: perceptions of whether personal actions will reduce a problem (Paton, Smith & Johnston, 2000, p. 2)

<u>Self-efficacy:</u> beliefs regarding personal capacity to act (Paton, Smith & Johnston, 2000, p. 2) **Illustrations:**

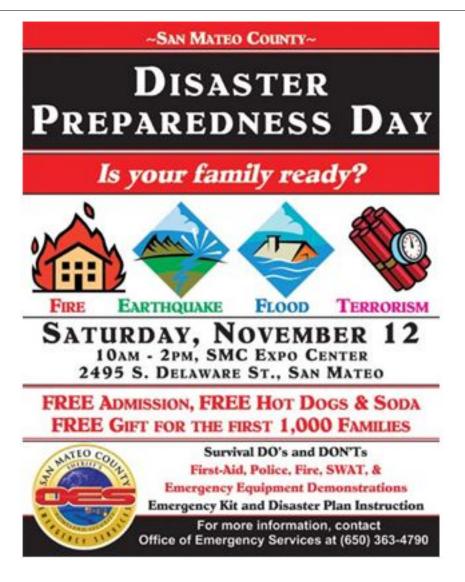


Figure 7.1

This poster illustrates an example of building community awareness and preparedness.

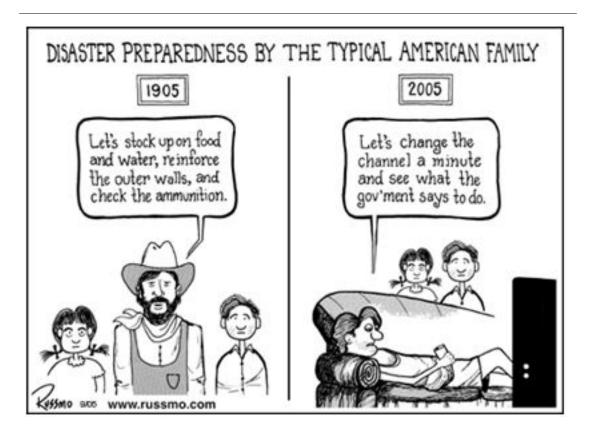


Figure 7.2

This cartoon shows how apathy about disaster preparedness has arisen in the U.S. Social workers must work to change this apathy.



Figure 7.3

Part of emergency preparedness is having the appropriate resources on hand. This picture shows some of the items that organizations should have available in case of a disaster.

7.2 Example 2

7.2.1 Brodie Mueller

Principle: Planning for a disaster can also be looked at from a health belief model standpoint. Therefore, it holds true that the single biggest predictor of the action will be perceived barriers, but also perceived susceptibility. Not only do people not know exactly what to do, but they do not think it will happen to them and disaster is never at the front of our minds. (Paton, Smith & Johnston (2000). When good intentions turn bad: Promoting disaster preparedness. Pp. 1-6.)

Justification: Insurance is the small chance of catastrophic loss, like disaster. But we only think about insurance when we have to pay it, or when we have to use it. But most people do not have a daily appreciation for insurance. We all know it is important to have fire escape plans and fire extinguishers, but not many of my friends, myself included, have these things. Why? Well I will not have a fire in my house, besides where would I get a fire extinguisher? This mentality is common when it comes to disaster planning. It cannot be me and I don't know what do it anyway.

Social Work Relevance: Because we know what keeps people from planning for disasters, (barriers, perceived susceptibility) we can work to remove those barriers and raise awareness to increase susceptibility. This can be looked at from many different lenses, Health Behavior Model is just one. But social workers have many ways to look at the same issue, and eliminate their barriers to action while raising self-efficacy and educating them about risks.

Definitions: Outcome Expectancy: perceptions of whether personal actions will reduce a problem

Self-efficacy: beliefs regarding personal capacity to act Risk perception: The belief that one is at risk for harm.

Awareness: extent to which people think and talk about a specific hazard

(Paton, Smith & Johnston (2000) p1-2)

Illustration

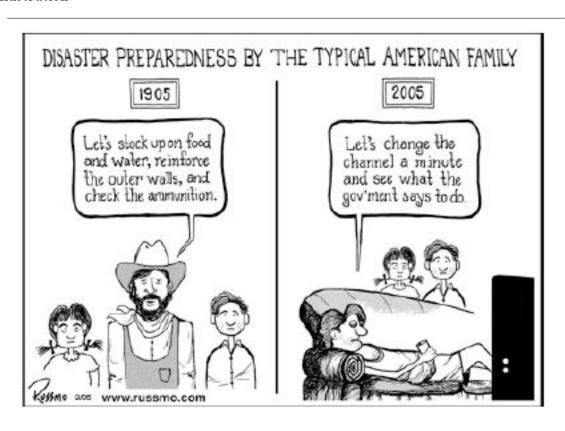


Figure 7.4

8. Formal Disaster Response¹

Objectives:

To understand functions, staffing, climate, and problems of the Emergency Operations Center

To learn about implementation of the incident command system

We consider the formal response to disasters beginning with disaster warning systems, mobilization of the Emergency Operations Center, and implementation of incident command system. The incident command system involves search and rescue, damage assessment, issues of debris clearance, removal and disposition. Also public health issues are addressed.

8.1 Example 1

8.1.1 Linda Davis

Description of Principle: "Social workers are ideally suited for disaster work, given their understanding of human behavior, emphasis on person-in-environment, experience in community work and program planning, and the value placed on advocacy and social justice" (Cronin & Ryan, 2010, p. 163)

Justification: In looking at disaster response, social workers have many skills that are necessary for a successful disaster response. For example, in the 2008 Wenchuan Earthquake, there as a great need for effective coordination of services, effective volunteer recruitment, training and management, education for community members about disaster, and individuals to support the community response (Lum, Wang, & Danso, 2010). All of these tasks could have been accomplished by well-trained social workers.

Social Work Relevance: This principle has direct relevance for social workers. As seen in this principle, social workers can use as "community organizing approach to work directly with the survivors and to empower them to actively participate in rebuilding their life" (Cronin & Ryan, 2010, p. 214). Social workers can also help mediate between top-down and bottom up approaches. Finally, social workers frequently provide mental health services during a formal disaster response.

Related Definitions:

National Incident Management System (NIMS): Policies put in place by the Department of Homeland Security that are based on two fundamental principles: (1) the system must be flexible, so that it can be used routinely by all types of domestic incidents, regardless of their cause, size, location or complexity; and (2) where appropriate, highly structured, standardized operational structures (Hannestad, 2005, p. 20).

Incident Command System (ICS): the tactical level of the NIMS for managing on-scene and direct support activities (Hannestad, 2005, p. 20).

Emergency Operating Centers (EOC): a higher-level command structure for situations where the scale of an emergency incident exceeds that capacity of an ICS (Hannestad, 2005, p. 24).

Roles of American Red Cross Mental Health Workers (Cronin & Ryan, 2010):

 $^{^{1}}$ This content is available online at <http://cnx.org/content/m40310/1.2/>.

Psychological First Aid- Relieving both physical and emotional suffering both physical and emotional, improving survivors' short-term functioning, helping survivors' course of recovery and providing linkage to critical resources

Crisis Intervention- providing psycho-education, moderating emotionality and helping the individual find adaptive solutions

Assessment-Evaluating mental health function and identifying intervention or referral for client or worker Casualty Support- providing grief counseling and support

Advocacy-Making sure primary needs are met and assisting in other capacities such as advocating for individual's privacy or helping find the person's pets

Outreach- Reaching people where they are- going door to door, to hospitals, etc.

Staff Support- Helping to maintain stable workforce through debriefing and developing trust with workers Illustrations:

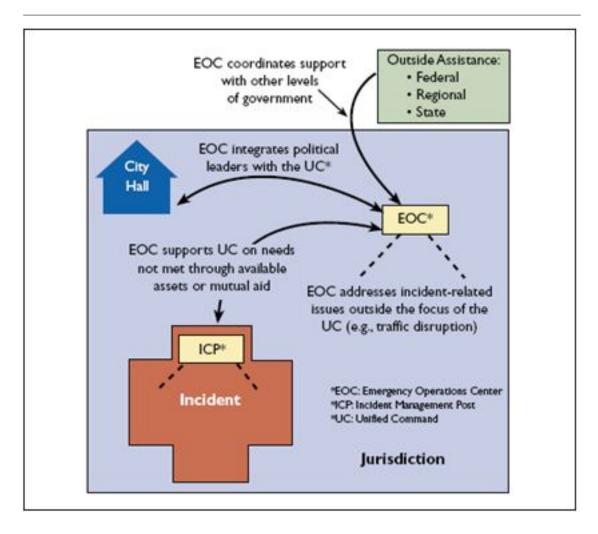


Figure 8.1

This diagram shows the relationship between the ICP and the EOC in a formal disaster response. Social workers are integrated into that system during a disaster response.



Figure 8.2

This picture shows a mental health worker providing support during a disaster situation.

8.2 Example 2

8.2.1 Brodie Mueller

Principle: Clear and effective leadership is one of the most important parts of ormal disaster response. Hannestad (2005). Incident Command System: A Developing National Standard of Incident Management in the U.S. Pp.19-28 in Carle & Van de Walle (eds.), Proceedings of the Second International ISCRAM Conference. Brussels, Belgium.

Justification - Split leadership can cause fractured directions and slow a response to a disaster. Likewise, poor collaboration and competition does not serve populations but only agencies. Obviously, Katrina shows the deadly effects of poor or fractured leadership when no one wants to take responsibility. Clear and effective leadership gets resources and people where they need to be in order to be utilized best.

Social Work Relevance - Psychological First Aid is one of the most important parts of the social work response, as in depth counseling is not often possible. This includes: 1. Relieve physical and emotional suffering. 2. Improve survivors short term functioning, 3. Help survivors course of recovery, 4. Provide linkage to critical resources (Danso and Gillespie, 2010, p 168) This does not require clear leadership, but something that we can do while leadership is being established if need be.

Definition: DHS - Dept of Homeland Security

 NIMS - National Incident Management System Illustration

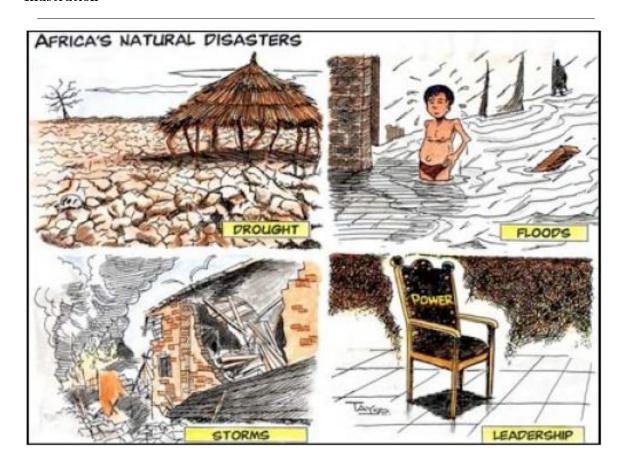


Figure 8.3

9. Informal Disaster Response¹

Objectives:

To understand patterns of victim and non-victim responses and emergent groups

To know some of the myths that surface in disasters

We examine typical responses of victims to disasters. We also consider the responses of non-victims, including spontaneous volunteers, donated goods, and mass assault. Disaster myths are exposed concerning evacuation, shelter, panic, looting, and others. We discuss the usefulness of the Disaster Research Center's typology on emergent groups.

9.1 Example 1

9.1.1 Linda Davis

Description of Principle: "An effective way to serve those indirectly affected is to design emergency response plans in anticipation of the 'need to do something'' (Lowe & Fothergill, 2003, p. 310)

Justification: Disaster management teams must come to expect that spontaneous volunteers will be compelled to help after a disaster. The efforts of these volunteers can have "had positive impacts both for the local community and for the volunteers themselves" if disaster managers are prepared for the influx of volunteers (Lowe & Fothergill, 2003, p. 303). Volunteering can help provide a feeling of solidarity in a community, and "by doing something altruistic that benefitted others, they transformed the negative into something positive, thereby experiencing their power to influence their environment" (Lowe & Fothergill, 2003, p. 309)

Social Work Relevance: Social workers involved in disaster management must "understand the need to volunteer and the positive impacts provided by volunteering" (Lowe & Fothergill, 2003, p. 309). Social workers can be organizers and advocates for volunteers because "public officials often do not take (volunteers) into account in community emergency management planning and misunderstand both the reasons behind their emergence and the roles they play in disaster-related community problems" (Stallings & Quarantelli, 1985, p. 94). By using a "community as a resource" model, social workers can "contribute significantly to the overall health of a community by preparing citizens to be soft mitigation resources and proactively engaging them as agents in their own and their community response and recover" (Lowe & Fothergill, 2003, p. 310).

Related Definitions:

<u>Volunteerism:</u> contribution of time without coercion or remuneration for public benefit (Lowe & Fothergill, 2003, p. 294)

Spontaneous Volunteers: those individuals who contribute on impulse immediately after a disaster (Lowe & Fothergill, 2003, p. 294)

External convergence: when people move into a disaster area (Lowe & Fothergill, 2003, p. 294)

 $^{^{1}}$ This content is available online at <http://cnx.org/content/m40312/1.2/>.

Internal convergence: when people move to specific sites within a disaster area (Lowe & Fothergill, 2003, p. 294)

Emergent groups: groups of citizens that emerge around perceived needs or problems associated with both natural and technological disaster situations (Stallings & Quarantelli, 1985, p. 94)

Illustrations:



Figure 9.1



Figure 9.2



Figure 9.3

These pictures demonstrate some of the tasks that volunteers can accomplish as part of the informal disaster response. Volunteers can provide everything from manual labor to blood if disaster management is prepared to integrate them into the work.

9.2 Example 2

9.2.1 Brodie Mueller

Principle: People need to help. (Lowe & Fothergill (2003). A Need to Help: Emergent Volunteer Behavior after September 11th. Pp.293-314 in Beyond September 11th: An Account of Post-Disaster Research: Special Publication #39. Boulder, CO: Natural Hazards Research and Applications Information Center, University of Colorado.)

Justification - Lowe and Fothergill share many testimonials of people who responded to 9/11 and shared their overwhelming need to help those affected and the urge to do something; anything. It helps us as humans to ease the psychological burden of surviving the disaster and then needing to help those

who have been negatively impacted.

Social Work Relevance: They have an urge or psychological need to help their community and as social workers we need to honor and use this for self empowerment. It is difficult with social agencies because not everyone has skills, but these experiences are important for easing internal pain or urge to do something.

Definition: Emergent Groups: Groups of citizens that for to help with disaster relief or tasks, groups that were not otherwise in existence.

Non-emergency time groups: Groups that continue to function after the disaster has passed and work towards disaster mitigation and preparation.

(Stallings & Quarantelli (1985). Emergent Citizen Groups and Emergency

Management. Public Administration Review 45, January, P. 96)

Illustration



Figure 9.4

10. Disaster Recovery¹

Objectives:

To learn about political, economic, and social issues influencing disaster recovery

To be aware of government disaster aid programs and assistance from voluntary agencies

We define disaster recover, outline what an ideal disaster process looks like, and examine obstacles and facilitators of recovery. Both short and long-term disaster recovery are considered. This involves political constraints and opportunities, economic incentives and disincentives, as well as social and cultural adaptations.

10.1 Example 1

10.1.1 Linda Davis

Description of Principle: "A community should strive to fully coordinate available assistance and funding while seeking ways to accomplish other community goals and priorities, using the disaster recovery process as the catalyst." (Natural Hazards Research and Applications Center, 2001, p. 1)

Justification: In the recovery phase of a disaster, communities have the potential to not only restore what they had before but to use the disaster as an opportunity to improve their community. As noted in this principle, this phase of disaster management "provides the opportunity to introduce sustainability into a community." (Natural Hazards Research and Applications Center, 2001, p. 12). By keeping this strengths-based perspective at the forefront of recovery, social workers and other professions can use this "window of opportunity" as a "time when past mistakes can be assessed, and drawing upon experience, try to demonstrate the way for the future" (Natural Hazards Research and Applications Center, 2001, p. 13).

Social Work Relevance: There are many obstacles in the recovery phase that could keep the community from being able to reach its potential recovery, including the degree of damage inflicted upon the community; other "money" issues, such as property rights, development, insurance, land use, and substandard housing; the propensity to strive for "a return to normal;" and a lack of awareness of what the true redevelopment possibilities are (Natural Hazards Research and Applications Center, 2001). Yet because the social work profession has traditionally engaged in advocacy, case management, and empowerment for oppressed and underserviced populations, it follows that the profession is challenged to tackle disparities in disaster relief and recovery service outcomes" (Teasley & Moore, 2010, p. 252).

Related Definitions:

<u>Short-term Recovery:</u> Early recovery efforts including search and rescue, damage assessments, public information, temporary housing, utility restoration, and debris clearance (Natural Hazards Research and Applications Center, 2001, p.4)

Long-term Recovery: the period where improvement and changes for the better such as

 $^{^{1}}$ This content is available online at <http://cnx.org/content/m40317/1.2/>.

strengthening building codes, changing land use and zoning designations, improving

transportation corridors and replacing "affordable housing" stock are considered (Natural Hazards Research and Applications Center, 2001, p. 4)

<u>Case management:</u> services which plan, secure, coordinate, monitor and advocate for unified goals and services with organizations and personnel in cooperation with individuals and families (Teasley & Moore, 2010, p. 247).

<u>Disaster Recovery Case Management:</u> practices that are unique to the delivery of services in the aftermath of emergencies and major incidents (Teasley & Moore, 2010, p. 247).

<u>Culturally Sensitive Disaster Case Management:</u> the process of establishing culturally acceptable approaches to intervention through education, training, knowledge, and skill development for the purpose of providing culturally acceptable and effective methods of intervention (Teasley & Moore, 2010, p. 248).

Illustrations:

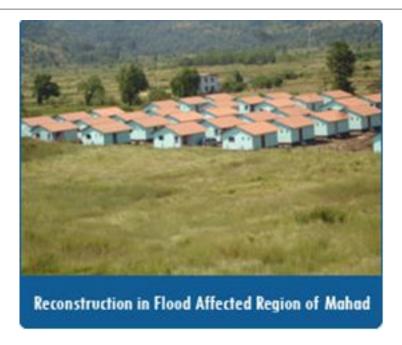


Figure 10.1

This picture shows the new community housing structure constructed during the recovery phase after flooding.

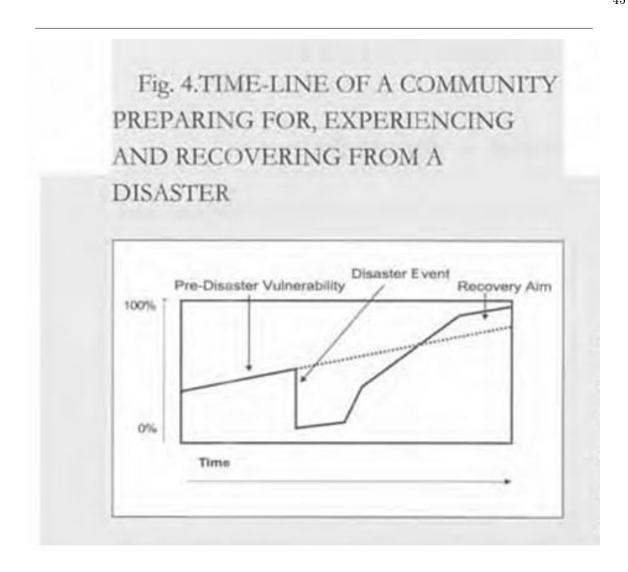


Figure 10.2

This diagram shows the ideal situation, where not only does the community return to normal, but actually improves its capacity after a disaster.

10.2 Example 2

10.2.1 Brodie Mueller

Principle: Recovery needs to be addressed during the beginning stages while disaster planning and mitigation are happening. (Natural Hazards Research and Applications Center (2001). The Disaster Recovery Process. Pp.31-43 (Chapter 2) in Holistic Disaster Recovery: Ideas for Building Local Sustainability after a Natural Disaster. Boulder, Colorado: Natural Hazards Research and Applications Information Center.

Justification - Just as discharge planning happens during intake when someone checks into the hospital,

recovery needs to be talked about before a disaster happens. If it is kept until the disaster happens, then the response will not be as effective and not related to mitigation activities. If recovery is talked about with mitigation, they can influence each other to increase effectiveness.

Social Work Relevance - When social workers are working with communities for education, planning and mitigation, we need to be addressing recovery, and showing how mitigation and recovery work together. This keeps recovery as a focus for people and allows them to plan for disasters more effectively.

Definition: Disaster recovery: Loosely related set of activities that occur before, during and after a disastrous event

Illustration



Figure 10.3

11. Disasters and Development¹

Objectives:

To appreciate the relationship between disasters and development

To learn how development can increase or decrease hazard vulnerability

Disasters can both destroy development initiatives and create development opportunities. Development projects can increase or decrease hazard vulnerability, and the development choices made can result in unequal distribution of disaster risk.

11.1 Example 1

11.1.1 Linda Davis

Description of Principle: "Natural disaster is intimately connected to the processes of human development" (United Nations Development Programme, 2004, p. 9).

Justification: Natural disasters are both impacted by and impact development processes. As noted by the United Nations Development Programme (2004), "Disasters triggered by natural hazards put development gains at risk. At the same time, the development choices made by individuals, communities, and nations can pave the way for unequal distributions of disaster risk" (p.9). Therefore, disaster mitigation must be considered in the process of development and in terming a community's long-term needs. When working towards development in countries across the world, "resources, technologies and organizational processes should be inextricably linked to the quality of the environment and to meeting the people's needs" (El-Masri & Tipple, 2002, p. 173). Disaster can trigger new development, but disaster mitigation techniques must be implemented as a country or community develops.

Social Work Relevance: Social workers have the opportunity to work towards "structural change and development consistent with mitigation" (Elliot, 2010, p. 103). Branches of social work that focus on human investment, social capital and microeconomics are ideal for advancing mitigation strategies within their services. The social development social work approach is "consistent with, is informed by, and encourages the application of current social work theories such as those outlined: empowerment practice, community assets approach, progressive social work, the ecological model, structural social work, social exclusion, feminist therapy, asset-based policies, and strengths-based practice" (Elliot, 2010, p. 103)

Related Definitions:

Social Development: a paradigm or perspective that has the capability of offering an extended role for social work in disasters including both micro- and macro-practice responses (Elliot, 2010, p. 91)

<u>International Social Work:</u> a branch of social work concerned with the development, administration, implementation, research, and evaluation- in and through global social institutions and organizations- of

¹This content is available online at http://cnx.org/content/m40315/1.2/.

policies and programs that promote human rights, human diversity, the well-being and empowerment of people worldwide, and global and social and economic justices (Elliot, 2010, p. 94).

Disaster Risk Index (DRI): the first global assessment of disaster risk factors through a

country-by-country comparison of human vulnerability and exposure to three critical natural hazards: earthquake, tropical cyclones and flooding, and the identification of

development factors that contribute to risk (United Nations Development Programme, 2004, p. 10).

<u>Natural hazards:</u> natural processes or phenomena occurring in the biosphere that may constitute a damaging event and that in turn may be modified by human activities, such as environmental degradation and urbanization (United Nations Development Programme, 2004, p. 11).

<u>Human vulnerability</u>: a condition or process resulting from physical, social, economic and environmental factors, which determine the likelihood and scale of damage from the impact of a given hazard (United Nations Development Programme, 2004, p. 11).

Coping capacity: the manner in which people and organizations use existing resources reactively, to limit losses during a disaster event (United Nations Development Programme, 2004, p. 11).

Illustrations:



Figure 11.1



Figure 11.2

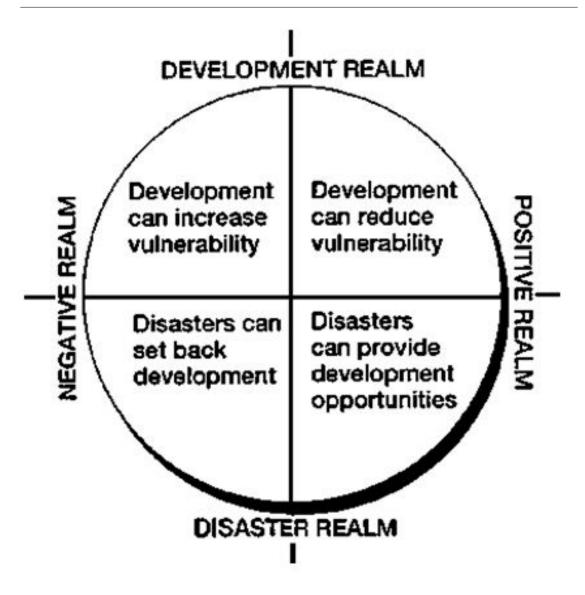


Figure 11.3

These pictures show how development practices can both reduce a community's vulnerability to disaster or increase the vulnerability. Therefore, it is important for those working within development to consider the long-term effects of their work and those working in disaster management to consider how development might help reduce the risk for their community.

11.2 Example 2

11.2.1 Brodie Mueller

Principle: Poverty and poor social structure does not cause disasters, but exacerbates their effects. (United Nations Development Programme (2004). Development at Risk. Pp. 9-28 (Chapter 1) in Reducing Risk: A Challenge for Development.)

Justification - Without people and society, there is no disaster, as a disaster is a community's inability to respond to a disaster. Sadly, there needs to be social development in order for it to be destroyed. They are always linked. However, when a society has poor infrastructure that is not organized well, a disaster will expose and take advantage of weaknesses.

Social Work Relevance - Poverty is a hard thing to fix, a hard thing to work with and a hard thing to work and live in. Many social workers are working to bring people out of poverty, and it is a long hard road. Disasters will happen along that road, and social workers need to understand that when disaster strikes, the impoverished will be hit harder as their poor infrastructure will be compromised. However, we cannot forget individual livelihood strategies and how powerful they are in impoverished life as well as their recovery.

Definition: Asset based community practice: identifying strengths and assets in a community

Social Development: Process of planned social change designed to promote the well being of the population as a whole in conjunction with a dynamic process of

economic development. (Elliott, D. (2010). A social development model for infusing disaster planning, management, and response in the social work curriculum. Disaster Concepts and Issues. Pp.89-105.)

Illustration:

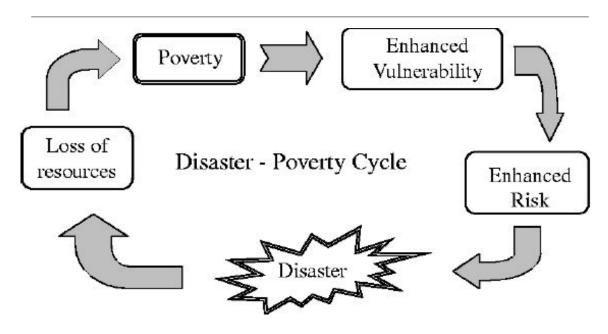


Figure 11.4

12. Information Technology¹

Objectives:

To understand the role of information technology in disasters

To appreciate barriers to implementing information technologies

We discuss applications of geographical information systems, training in virtual environments for first responders, barriers to the implementation of information technologies, difficulties that arise in disaster responses, and the impacts on organizations of adopting information technologies.

12.1 Example

12.1.1 Jessica Porter

Principle:

The disaster mitigation, management and recovery process should accept and utilize technology and its many incredible possibilities in making information and data readily available to anyone.

Key Terms:

Global Positioning Systems (GPS): is a space-based global navigation satellite system (GNSS) that provides location and time information in all weather and at all times and anywhere on or near the Earth when and where there is an unobstructed line of sight to four or more GPS satellites.

Geographic Information System (GIS) or geospatial information system: is a computer system that captures, stores, analyzes, manages and presents data with reference to geographic location data. It is a merging of cartography, statistical analysis and database technology.

Reading Quote:

"Recent areas of application of GIS methods in humanitarian emergencies include hazard, vulnerability, and risk assessment; rapid assessment and survey methods; disease distribution and outbreak investigations; planning and implementation of health information systems; data and programme integration; and programme monitoring and evaluation" (Disasters, 2003, pg.127).

"In theory, if responders have perfect information, they find victims and assist them immediately. However, in practice, rescue agents do not know exactly who needs what kinds of help in which locations" (Disasters and Response Systems, 299).

Justification of Principle:

The use of technology for the collection of information and data management could help agencies coordinate their efforts and make sure that all their bases are covered because it connects people right away and there is no waiting around for a response or for the phone lines and cell phone towers to be repaired.

Relevance to Social Work:

 $[\]overline{\ ^{1}{
m This}}$ content is available online at ${
m <http://cnx.org/content/m40333/1.1/>}$.

The agencies and first responders in disasters could benefit from the use of technology to do assessments and get help in real time. It also reduces the amount of paper used on site that has a potential to get lost in the shuffle. Global Positioning Systems (GPS) use satellites and can get a signal from anywhere around the world or down the block. The use of Geographic Information System (GIS) could also helps with disaster preparation and further disaster management research which could be aided or conducted by a social worker.

Illustration:



Figure 12.1: Technologies can connect anyone from anywhere at any time even if they are halfway around the world



Figure 12.2: Radios have also advanced with cranks and satellite tuning



Figure 12.3: PDAs and other devices have provided information to people in real time

13. Theory and Data¹

Objectives:

To appreciate disasters as strategic research sites

To know how to access cross-national data bases

We discuss research opportunities with disasters, and certain issues of particular significance to disaster settings, such as transient data, practitioner-researcher cooperation, and automated retrieval systems. In addition, we consider validity and reliability which are important in all kinds of research. Some cross-national data bases are identified, and we discuss areas of research strength and areas of greatest need in disaster.

 $^{^{1}}$ This content is available online at <http://cnx.org/content/m40328/1.2/>.

14. Issues in the Disaster Field¹

Objectives:

To learn about controversial issues current in the disaster field

To understand ways that social work is contributing and can further contribute to disaster preparedness, mitigation, response, and recovery

We discuss questions such as: Who should pay for disaster? What is the role of the federal government? What is the best way to deal with diversity issues (gender, ethnicity, and social class)? Do those who influence public disaster policies have the public's interest in mind? Who is responsible for Third world recovery?

 $^{^{1}}$ This content is available online at <http://cnx.org/content/m40331/1.1/>.

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DISASTER AND VULNERABLE POPULATIONS

This is an example of using Connexion to organize students' Reference Digest of Disaster Principles.

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