

Session No. 27

Course Title: Social Dimensions of Disaster, 2nd edition

Session 27: Disaster Inequalities

1 hr.

Objectives:

- 27.1 Define and illustrate the concept of “disaster inequalities”
- 27.2 Identify and illustrate four social factors that constrain the patterns among disaster inequalities
- 27.3 Describe at least one example of disaster inequalities in each of the four disaster phases
- 27.4 Explain the social vulnerability approach to disasters
- 27.5 Discuss four guidelines for emergency managers working with culturally and linguistically diverse communities.

Scope:

This session introduces students to the concept of disaster inequality and the types of social factors that constrain various forms of inequality. Illustrations reflect numerous types of vulnerable groups, e.g., gender, ethnic, and age diversity and inequalities within each of the four disaster phases. The social vulnerability approach to disasters and guidelines for emergency managers working with diverse communities are described.

Readings:

Student Reading:

Fothergill, Alice. 1996. “Gender, Risk, and Disaster.” *International Journal of Mass Emergencies and Disasters* 14:33-56.

Professor Readings:

Mitchell, Louise. 2003. “Guidelines for Emergency Managers Working with Culturally and Linguistically Diverse Communities.” *The Australian Journal of Emergency Management* 18 (February):13-18.

Morrow, Betty Hearn and Elaine Enarson. 1996. "Hurricane Andrew Through Women's Eye's: Issues and Recommendations." *International Journal of Mass Emergencies and Disasters* 14:5-22.

Buckle, Phillip, Graham Mars, and Syd Smale. 2000. "New Approaches to Assessing Vulnerability and Resilience." *The Australian Journal of Emergency Management* 15 (Winter):8-15.

Background References:

Enarson, Elaine, Cheryl Childers, Betty Hearn Morrow, Deborah Thomas, and Ben Wisner. 2003. *A Social Vulnerability Approach to Disasters*. Emmitsburg, Maryland: Emergency Management Institute, Federal Emergency Management Agency. (<http://www.training.fema.gov/emiweb/edu/completeCourses.asp>).

Dymon, Ute J. and Robert Schwartz. 2002. "Nursing Home Evacuation Plans: Myth or Reality." *Journal of the American Society of Professional Emergency Planners* 9:97-107.

Fothergill, Alice. 1999. "An Exploratory Study of Woman Battering in the Grand Forks Flood Disaster: Implications for Community Responses and Policies." *International Journal of Mass Emergencies and Disasters* 17:79-98.

Fothergill, Alice, E. Maestas, and J. Darlington DeRover. 1999. "Race, Ethnicity, and Disasters in the United States: A Review of the Literature." *Disasters: The Journal of Disaster Studies and Management* 23:156-173.

Enarson, Elaine and Betty Hearn Morrow. 1998. *The Gendered Terrain of Disaster*. Westport, Connecticut: Praeger Publishers.

General Requirements:

Overheads (27-1 through 27-6 appended).

Student Handout 27-1.

See individual requirements for each objective.

Objective 27.1 Define and illustrate the concept of "disaster inequality."

Requirements:

Use Overheads 27-1 through 27-2.

Start this session with student exercise and proceed with lecture material specified below.

Remarks:

I. Introduction.

A. **Exercise.**

1. **Remind** students of exercise procedures.
2. **Divide** class into four groups and assign roles.
 - a. Chair.
 - b. Reporter.
 - c. Timer.
3. **Announce** time limit: 5 minutes.

B. **Display** Overhead 27-1; “Workshop Tasks.”

1. Group 1 – According to Fothergill (1996), how does gender constrain the exposure to and perception of disaster risk?
2. Group 2 – According to Fothergill (1996), how does gender constrain disaster preparedness activities and warning responses?
3. Group 3 – According to Fothergill (1996), how does gender constrain physical and psychological impacts of disaster?
4. Group 4 – According to Fothergill (1996), how does gender constrain actions taken during the emergency response, recovery, and reconstruction phases of disaster?

C. **Start** discussion.

D. **Stop** discussion.

E. Explain that the report from Group 4 will be presented later in the Session.

II. Disaster inequalities.

A. **Display** Overhead 27-2; “Disaster Inequalities: Key Definitions.”

B. **Review** the concept of **social inequalities**.

1. **Key elements of definition.**

- a. Patterns of differential distributions.
- b. Power, privilege (wealth), and prestige.

2. **Illustrations.**

- a. Some social positions exercise greater **power** than others, e.g., corporate CEO vs. line staff member; father vs. child.
- b. Some social positions reflect greater amounts of **privilege** (wealth), e.g., professional football player vs. elementary school teacher; corporate executive vs. typical church minister.
- c. Some social positions reflect greater **prestige**, e.g., college professor vs. elementary school teacher; U.S. Supreme Court member vs. typical corporate CEO.

C. **Review** the concept of **social stratification.**

1. **Key elements of definition.**

- a. Degree to which social inequalities are **concentrated** or **equalized**.
- b. Among members of social systems.
- c. Social systems may be groups like families, organizations, communities, and societies.

2. **Illustrations.**

- a. Ask students: “Reflecting your readings in the social sciences and the article by Fothergill (1996, assigned reading), what are some examples of **social stratification**?”
- b. **Families**, some reflect shared decision-making between the husband and wife while in others one social position, typically the husband, may make the majority of decisions (equalitarian vs. patriarchal marriage).
- c. **Organizations**, some voluntary associations and even many universities reflect shared decision making patterns while in others the power is highly centralized.

- d. **Communities**, some reflect a concentration of wealth among a few families while others are much less stratified with all families having a bigger piece of the pie.
- e. **Societies**, many reflect highly concentrated distributions of power, privilege, and prestige wherein a few wealthy families control the life opportunities of the vast majority of very poor.

D. **Review** the concept of **disaster inequalities**.

1. **Key elements of definition.**

- a. Patterns of the differential distributions.
- b. Risk and perceived risk.
- c. Associated activities of preparedness, response, recovery, and mitigation.

2. **Illustrations:** these will be discussed throughout the session and following the group reports.

E. Related concepts.

- 1. **Vulnerability**, that is, some groups are more vulnerable than others.
- 2. **Ask students:** “What would be an example of a group that might have a higher vulnerability during a specific disaster event?” **Answer:** ethnic minority, poor, children, females.
- 3. **Inequity**, a **recognition** of inequality and/or differential vulnerability in disaster impact **and** a **judgment** about such indicating undesirability.
- 4. **Ask students:** “Are all disaster inequalities undesirable?” **Answer:** no specific judgment can be made without invoking personal definitions of social values. **Note:** the point of raising this issue is **not** to produce a class consensus about what is “good” or “bad”, but rather to emphasize diversity of viewpoints within a community.

III. Differential risk exposures and perceptions.

A. Group 1 report: 2 minutes.

B. **Integrate** material from Group 1 report and **elaborate** as required: (based on Fothergill 1996, pp. 35-37).

1. More women **live in poverty** and therefore experience a disproportionate **exposure to risk** (p. 36).

2. More women are “**risk-avoiders**” (p. 37).

C. **Depending** on thoroughness of Group 1 report, ask students: “What types of example studies did Fothergill use to document each of these patterns?” (Note: all study references not included in the listing at the end of this session were cited by Fothergill 1996, pp. 49-56).

1. **Exposure to risk**, e.g., Hurricane Andrew findings by Morrow and Enarson (1994). (p. 36).

2. **Perception of risk**, e.g., Mount St. Helens threat study by Leik et al. (1982). (p. 37).

IV. Differentials in disaster preparedness and warning responses.

A. Group 2 report: 2 minutes.

B. **Integrate** material from Group 2 report and **elaborate** as required: (based on Fothergill 1996, pp. 37-40).

1. Women volunteer more frequently for **disaster preparedness**, but frequently are absent in **decision-making** activities (p. 38).

2. Women are more likely to **hear warnings** and **evacuate** more quickly (p. 39).

C. **Depending** on the thoroughness of Group 2 report, ask students: “What types of example studies did Fothergill use to document each of these patterns?”

1. **Disaster preparedness**, e.g., Neal and Phillips (1990) study of grassroots organizations (p. 38).

2. **Decision-making**, e.g., Red Cross organization studies by the League of the Red Cross and Red Crescent Societies (1991), (p. 38).

3. **Disaster warning**, e.g., Drabek (1969) study of Denver flood (p. 39).

4. **Warning response**, e.g., Mount St. Helens study by Leik et al. (1982), (p. 39).

V. Differentials in physical and psychological impacts.

- A. Group 3 report: 2 minutes.
- B. **Integrate** material from Group 3 report and elaborate as required: (based on Fothergill 1996, pp. 40-44).
1. **Physical impacts** reflect a mixed pattern depending on disaster type and an individual's location at time of impact.
 - a. **Disaster type**, e.g., tornadoes, more women die; lightning, more men die (p. 40).
 - b. **Location**, e.g., women stay inside buildings because of child and elder care responsibilities (p. 41).
 2. **Psychological impacts** reflect a mixed pattern depending on measurement.
 - a. **Expression of symptoms**, women report higher levels of anxiety (p. 42).
 - b. **Behavioral indicants**, men manifest higher levels of depression and alcohol abuse (p. 43).
- C. **Depending** on the thoroughness of Group 3 report, ask students: "What types of example studies did Fothergill use to document each of these patterns?"
1. **Physical impacts - disaster type**, e.g., U.S. Dept. of Commerce (1995) study, twice as many men died in flash floods, winter storms and lightning strikes; Glass and associates (1980) reported more women died in tornadoes (p. 40).
 2. **Physical impacts – location**, e.g., two earthquakes in Russia studied by Rivers (1982) produced higher death rates among women who had child care responsibilities (p. 41).
 3. **Psychological impacts – expressions of symptoms**, e.g., following the Buffalo Creek flood, females reported more post-traumatic stress disorder (PTSD) symptoms according to Green et al. (1992) (p. 42).
 4. **Psychological impacts – behavioral indicants**, e.g., following Hurricane Agnes, more men experienced decreases in mental and physical well-being according to Logue et al. (1979) (p. 43).

Supplemental Considerations:

The primary message of this section is to **introduce the concept** of disaster inequalities. Through the numerous **examples** provided by Fothergill's **literature review**, students will have an **enhanced understanding** of the general concept and the key constraint provided by gender. While most professors may wish to keep this section **brief**, others may challenge their class to formulate example **research study designs** whereby some of the **inconsistencies** among study findings might be explored. Others may **expand** this section through more detailed presentations and discussion of social stratification **research** studies. Many universities offer an entire course on this topic and related areas, e.g., race and ethnic relations, gender studies, etc.

Objective 27.2 Identify and illustrate four social factors that constrain the patterns among disaster inequalities.

Requirements:

Use Overheads 27-3 and 27-4.

Remarks:

- I. Gender.
 - A. **Display** Overhead 27-3; "Constraints on Disaster Inequalities."
 - B. **Explain:** examples of the variety of ways that **gender constrains** disaster inequalities was the primary point of Fothergill's (1996) article.
 - C. **Ask students:** "Out of all of the examples presented by the reporters for Groups 1,2, and 3, which was the biggest surprise to you? You know, something you never had realized before or thought about?" (Discuss two or three student generated illustrations).
 - D. **Ask students:** "Of course, Fothergill (1996) presented more examples of the ways in which gender constrains disaster inequalities than the three groups could present. Take a second and review your notes or the article itself, and select one example that you believe is important that none of the groups covered." (Discuss three or four student generated illustrations).
- II. Age.
 - A. **Ask students:** "While not her central focus, Fothergill (1996) did provide many examples of how the social factor of age constrains disaster inequalities. Which of these do you believe are most important?"
 - B. **Record** student generated examples on the chalkboard.

- C. **Elaborate** to insure student understanding, as required, with examples like these. **Emphasize the interdependencies** among the social factors.
1. **Tornado deaths:** higher among women, especially elderly women (Glass et al. 1980) (p. 40).
 2. **Earthquake deaths:** Japanese researchers reported “. . . that women were more active in protecting children and the elderly and this contributed to their deaths.” (p. 41).

III. Ethnicity.

- A. **Ask students:** “Ethnicity was not Fothergill’s major focus, but she provided many examples of how this social factor constrained disaster inequalities. Which of these examples would you select as a good illustration?”
- B. **Record** student generated examples on the chalkboard.
- C. **Elaborate** to insure student understanding, as required, with examples like these. **Emphasize the interdependencies** among the social factors.
1. **Distribution of risk:** “Research finds that the poor and people of color in society are at greater risk to disasters . . .” (p. 36).
 2. **Risk perception:** Flynn et al. (1994) study of environmental health risks documented that “. . . women and people of color discern risks as larger because of their relative lack of control and power in the society.” (p. 37).

IV. Socio-economic status.

- A. **Ask students:** “Finally, let’s review another very important social factor— socio-economic status. What examples did Fothergill (1996) provide?”
- B. **Record** student generated examples on the chalkboard.
- C. **Elaborate** to insure student understanding, as required, with examples like these. **Emphasize the interdependencies** among the social factors.
1. **Distribution of risk:** “. . . the poor and people of color are at greater risk to industrial disasters as they are more likely to live near hazardous facilities (Bullard 1990).” (p. 36).
 2. **Physical impacts:** “. . . women in lower income countries are more likely to die in disasters.” (p. 40).

V. Other social factors that constrain disaster inequalities.

- A. **Ask students:** “OK, research on the patterns and consequences of social inequalities within and among societies clearly demonstrates the significance of gender, age, ethnicity and socio-economic status. But there are additional groups within a society that are more vulnerable to disaster. What are some of these?”
- B. **Record** student generated examples on the chalkboard.
- C. **Display** Overhead 27-4; “Other Socially Vulnerable Populations.”
- D. **Remind** students of the discussion of “Special Populations” regarding evacuation planning, i.e., Session No. 11 entitled “Community Evacuation Behavior” (Overhead 11-7; “Special Populations”).
- E. **Emphasize**, prior discussion was limited to evacuation issues.
- F. **Ask students:** “In contrast to evacuation issues, what examples can you provide for groups like these listed on the overhead using the typology Fothergill (1996) used?”
- G. **Record** student generated examples on the chalkboard.
- H. **Integrate** and elaborate as necessary with examples like these.
 - 1. **Warning responses:** non-English speaking may not understand emergency information being disseminated.
 - 2. **Recovery:** single parent families may have limited resources for disaster recovery and experience conflicts with job requirements during the restoration and recovery process.

Supplemental Considerations:

Some professors will wish to review the Instructor Guide prepared by Enarson et al. (2003) entitled *A Social Vulnerability Approach to Disasters*. Materials from this course could be reviewed or integrated within this section and the next so as to **expand this session** into a four or five hour unit. The **disaster inequality theme** could be illustrated through additional articles or selections of a book length case study wherein the various **social factors could be dissected** in more detail. Additional emphasis on race and socio-economic status could be introduced to complement the gender focus of this section. The **key message** of the section, however, is that disasters, like other **social problems** within society, are **best understood** within frameworks that emphasize the **differential distributions** of **risk** and **social impact**. This **lesson** is a critical one for **all** emergency managers.

Objective 27-3 Describe at least one example of disaster inequalities in each of the four disaster phases.

Requirements:

Use Overheads 27-1 and 27-5.

Remarks:

- I. Fothergill (1996) literature review.
 - A. **Display** Overhead 27-1; “Workshop Tasks”.
 1. **Remind** students of the task assigned to Group 4.
 2. Group 4 report: 2 minutes.
 - B. **Display** Overhead 27-5; “Disaster Inequalities Across the Four Phases.”
 - C. **Ask students:** “OK, now let’s review the points made by the reporter from Group 4. What would be an example of a disaster inequality they summarized during the preparedness phase?”
 1. **Rephrase** above question for response.
 2. **Rephrase** above question for recovery.
 3. **Rephrase** above question for mitigation.
 4. **Explain:** Fothergill’s (1996) typology of categories did not include mitigation, rather related findings were included in the other nine categories used in her analysis (p. 35).
 - D. **Explain to students:** “Recognizing the time constraints imposed on the Group 4 reporter, please review your notes and the Fothergill (1996) article and let’s identify a few **additional** examples for each of the four disaster phases.” (Use Overhead 27-5 as a referent during the discussion).
 - E. **Note:** all study references not included at the end of this session were cited by Fothergill 1996, pp. 49-56.
- II. Preparedness phase.

- A. **Ask students:** “OK. Let’s start with preparedness. What is an example of a disaster inequality during the preparedness phase that was **not** included in the report from Group 4?”
- B. **Record** student responses on the chalkboard. These could be organized under a sub-title for each of the four phases.
- C. **Elaborate**, as necessary, with examples like these from Fothergill (1996).
 - 1. “. . . women prepare their families and communities for disaster more than men.” (p. 38).
 - 2. “Morrow and Enarson (1994) disclose that before Hurricane Andrew, women were responsible for preparing their family members, stocking supplies, and getting the household ready for the storm.” (p. 38).
- D. **Nursing home preparedness study:** Dymon and Schwartz (2002).
 - 1. **Location:** Cuyahoga County, Ohio.
 - 2. **Sample:** random selection (n = 25) from 200 nursing homes and 24 hospitals in nine emergency districts (p. 99).
 - 3. **Key finding:** 55% of residents could walk to a bus, but 45% would require assistance and of these 17% were bedridden and would require an ambulance.
 - 4. **Key finding:** over one-half (60%) of the nursing homes studied were located within one mile radius of a hazardous facility; 92% were not aware of such nearby facilities.

III. Response phase.

- A. **Ask students:** “OK, now let’s turn to the response phase. What is an example of a disaster inequality during this phase that was **not** included in the report from Group 4?”
- B. **Record** student responses on the chalkboard under the sub-title of “response.”
- C. **Elaborate**, as necessary, with examples like these from Fothergill (1996).
 - 1. “Dann and Wilson (1993) relay that men are involved in more visible ‘town projects’ and receive much more recognition and media attention for their work” (p. 45).

2. “Women, contrarily, often do the ‘unheralded clean-up duty’ at home, sweeping up glass and doing minor repairs, work which is not visible, receives no media attention, and remains largely unrecognized (Dull 1994; Dobson 1993).” (p. 45).

D. **Hurricane Andrew study:** Morrow and Enarson (1996).

1. “We heard one study of the fruitless attempt of several single mothers to protect their public housing apartments. When they couldn’t reach the housing authorities, they carried plywood from a nearby construction site and attempted to cover their windows. Fortunately, right before the storm began they walked with their children to the nearest highway and hitched a ride out of the evacuation zone, saving themselves but not their homes and possessions.” (p. 9).
2. “The stressful, overcrowded living conditions in tents, trailers, temporary rentals, and partially destroyed homes were reported as a major factor in increased family conflict and health problems such as hypertension and depression. Particularly hard on children and adolescents were the losses of friends, recreational facilities, privacy and personal space, and previously taken-for-granted belongings, conveniences, and neighborhoods.” (pp. 9-10).

IV. Recovery phase.

- A. **Ask students:** “As we have emphasized previously, the boundaries between the lifecycle phases of a disaster, are not clear cut. There is overlap. Putting this aside, however, what examples of disaster inequality during the **recovery phase** did you discover in Fothergill’s (1996) article that were **not** highlighted in the report from Group 4?”
- B. **Record** student responses on the chalkboard under the heading of “recovery”.
- C. **Elaborate**, as necessary, with examples like these from Fothergill (1996).
 1. “Many men . . . view the financial aid as a stigma and feel the payments challenge their role as breadwinner (Honeycombe 1993).” (p. 46).
 2. “Men did not always use the relief money to help their families; some purchased cars, liquor, airplane tickets, and various personal items; others sent the money to relatives out of the country, leaving no relief funds for their wives and children.” (p. 46).
- D. **Grand Forks flood study:** Fothergill (1999).

1. The Community Violence Intervention Center “. . . found that prior to the flood, during the period of January to March 1997, there were twenty protection orders issued. However, after the flood, during the same period of 1998, January to March, there were thirty-three protection orders that needed to be filed to protect women in domestic violence situations, which indicates a substantial increase.” (p. 86).
2. “. . . volunteer hours are down, even six months after the event, as volunteers are still working on repairing their own homes and lives. By having fewer volunteers to help in the office, the staff finds itself with even more work.” (p. 87).

V. Mitigation phase.

A. **Ask students:** “Although Fothergill did not use mitigation as a separate category in which to classify research findings, what examples of disaster inequality did you discover in her article that were **not** highlighted in the report from Group 4?”

B. **Record** student responses on the chalkboard under the heading “mitigation”.

C. **Elaborate**, as necessary, with examples like these from Fothergill (1996).

1. “Neal and Phillips (1990) find that women outnumber men in the leadership and membership of ‘citizen emergent groups,’ grassroots organizations working on community disaster issues.” (p. 38).
2. “The female-dominant groups, however, are not always seen as legitimate; outside officials often perceive them as ‘hysterical housewives’ and trivialize their disaster work.” (p. 38).

D. **FEMA For Kids** (adapted from Enarson et al. 2003, p. 13-10).

1. Internet access @ <http://www.fema.gov/kids/>
2. To mitigate against age based disaster inequality, children might become involved in the creation of a family “disaster kit” that would include:
 - a. Water.
 - b. Canned food.
 - c. Battery powered radio.
 - d. Flashlight.

- e. Change of clothing for each family member.
- f. Important family papers.

Supplemental Considerations:

The message of this section is that **disaster inequalities** of varying types exist across **all four** of the disaster phases. Some professors may wish to **expand** this section through examination of additional research studies like those summarized in the course prepared by Enarson et al. 2003, i.e., *The Social Vulnerability Approach to Disasters*. Discussion of **alternative research designs** for future studies could be done as a class exercise or in group discussions, e.g., one group for each of the four disaster phases. Such expansions could **extend the time** of this session into three or even four class meetings if desired.

Objective 27.4 Explain the social vulnerability approach to disasters.

Requirements:

Use Student Handout 27-1.

Remarks:

- I. Definition.
 - A. **“The essence of the vulnerability approach is to investigate the role of social, economic, and political relations in the creation of hazardous situations in a specific place.”** Enarson et al. 2003, p. 2-15.
 - B. “It also investigates the social distribution of risk in that place (that is: which social groups are more or less at risk to one or another of an array of hazards).” Enarson et al. 2003, p. 2-15.
 - C. **Explain:** the types of social inequalities documented by Fothergill (1996) reflect this approach.
- II. A comparison: technocratic vs. vulnerability approach.
 - A. **Distribute** Student Handout 27-1; “Technocratic vs. Vulnerability Approach to Emergency Management.”
 - B. **Review** points of contrast and illustrate as necessary (adapted from Enarson et al. 2003, p. 2-22).
 - 1. Physical processes vs. socio-economic-political factors.

2. Hierarchical style vs. decentralized style.
3. Applies technology vs. applies local knowledge.
4. Top-down vs. bottoms up.
5. Goal = damage reduction vs. goal = reduce people's vulnerability.
6. Utilitarian and conquest of nature vs. egalitarian and co-existence with nature.
7. Linear and bounded systems vs. non-linear and open systems.

Supplemental Considerations:

Professors should emphasize that an **entire course** has been developed to enhance student understanding of the social vulnerability approach, i.e., Enarson 2003. Through this **brief** introduction the **essence** of this approach can be understood. While disaster inequalities of one type or another **have been documented** for decades, most researchers have **not** made them a central focus of their work. Recently, however, through the efforts of the several team members who prepared the FEMA Instructor Guide, and others, the social vulnerability approach is gaining in **popularity**. **Expansion** of this section could be accomplished by **incorporating desired materials** from the social vulnerability course like these: socio-economic (Session 8); race and ethnicity (Sessions 9 and 10); gender (Session 11); age (Session 13); disabled (Session 14).

Objective 27.5 Discuss four guidelines for emergency managers working with culturally and linguistically diverse communities.

Requirements:

Use Overhead 27-6.

Remarks:

- I. Emergency manager guidelines: culturally and linguistically diverse (CALD) communities.
 - A. **Display** Overhead 27-6; "Emergency Management Guidelines for CALD Communities."
 - B. **Explain:** CALD = Culturally and Linguistically Diverse Communities.
 - C. **Review** and illustrate the guidelines (adapted from Mitchell 2003, p. 14-15).

1. Identify community membership.
2. Build connections.
3. Two-way communication.
4. Identify and respond to community needs.
5. Assist in education and training.
6. Implement monitoring and evaluation processes.
7. Basic principles.
 - a. Inclusiveness.
 - b. Trust.
 - c. Local approach.

II. Case study: Childers backpacker hostel fire (Mitchell 2003).

A. **Location:** Childers, Australia.

B. **Event:** fire at hostel.

C. **Date:** June 23, 2000 (midnight).

D. **Consequences:** 15 people from 6 countries died (4 Australians, 6 Britons, 2 Dutch, 1 Irish, 1 Japanese, and 1 South Korean); 69 survivors from varied nations.

E. **Emergency management implications.**

1. Tourism businesses often not linked to EM officials.
2. Relative inquiries (national and international).
3. 1-800 phone number: free telephone calls were made available worldwide for relatives with inquiry needs.
4. Release of names (“ . . . the names of the dead not being released for five days, added to the stress of the relatives and to the number of telephone enquires received.” (p. 15).

5. Use of e-mail: “the backpacker community uses email services prolifically and information was sent, unofficially, around Australia and overseas using this media.” (p. 15).

Supplemental Considerations:

This section could be **expanded** through class discussions focused on the emergency management implications of other disaster inequalities such as gender, age, socio-economic status, etc. Professors requiring assistance with such discussion should **consult the course** designed by Enarson et al. (2003).

Course Developer References:

- I. Buckle, Phillip, Graham Mars, and Syd Smale. 2000. “New Approaches to Assessing Vulnerability and Resilience.” *The Australian Journal of Emergency Management* 15 (Winter):8-15.
- II. Dymon, Ute J. and Robert Schwartz. 2002. “Nursing Home Evacuation Plans: Myth or Reality.” *Journal of the American Society of Professional Emergency Planners* 9:97-107.
- III. Enarson, Elaine, Cheryl Childers, Betty Hearn Morrow, Deborah Thomas, and Ben Wisner. 2003. *A Social Vulnerability Approach to Disasters*. Emmitsburg, Maryland: Emergency Management Institute, Federal Emergency Management Agency. (<http://www.training.fema.gov/emiweb/edu/completeCourses.asp>).
- IV. Enarson, Elaine and Betty Hearn Morrow. 1998. *The Gendered Terrain of Disaster*. Westport, Connecticut: Praeger Publishers.
- V. Fothergill, Alice. 1996. “Gender, Risk, and Disaster.” *International Journal of Mass Emergencies and Disasters* 14:33-56.
- VI. Fothergill, Alice. 1999. “An Exploratory Study of Woman Battering in the Grand Forks Flood Disaster: Implications for Community Responses and Policies.” *International Journal of Mass Emergencies and Disasters* 17:79-98.
- VII. Fothergill, Alice, E. Maestas, and J. Darlington DeRover. 1999. “Race, Ethnicity, and Disasters in the United States: A Review of the Literature.” *Disasters: The Journal of Disaster Studies and Management* 23:156-173.
- VIII. Mitchell, Louise. 2003. “Guidelines for Emergency Managers Working with Culturally and Linguistically Diverse Communities.” *The Australian Journal of Emergency Management* 18 (February):13-18.

- IX. Morrow, Betty Hearn and Elaine Enarson. 1996. "Hurricane Andrew Through Women's Eye's: Issues and Recommendations." *International Journal of Mass Emergencies and Disasters* 14:5-22.