

Session No. 19

Course Title: Social Dimensions of Disaster, 2nd edition

Session 19: Emergent Social Groups in Disaster

1 hr.

Objectives:

- 19.1 Describe three propositions derived from emergent norm theory (ENT) that pertain to group emergence within disaster environments and have been validated empirically
- 19.2 Identify three social factors that increase the probability of group emergence following disasters
- 19.3 Give two examples for each of the four types of systems defined in the DRC Typology
- 19.4 Describe two examples of elaborations or extensions of the DRC Typology
- 19.5 Describe the emergent organizational patterns among Search and Rescue (SAR) groups following a disaster
- 19.6 Discuss the relevance of an understanding of emergent systems for emergency managers.

Scope:

This session delineates the types of emergent social groups documented within post-disaster environments and provides two case illustrations. Principles and concepts from Emergent Norm Theory (ENT) provide an interpretative framework.

Readings:

Student Reading:

Aguirre, Benigno E., Dennis Wenger and Gabriela Rico. 1998. "A Test of the Emergent Norm Theory of Collective Behavior." *Sociological Forum* 13:301-320.

Professor Readings:

Drabek, Thomas E. and David A. McEntire. 2003. "Emergent Phenomena and the Sociology of Disaster: Lessons, Trends and Opportunities from the Research Literature." *Disaster Prevention and Management* 12:97-112.

Aguirre, Benigno E., Dennis Wenger, Thomas A. Glass, Marcelino Diaz-Murillo, and Gabriela Vico. 1995. "The Social Organization of Search and Rescue: Evidence from the Guadalajara Gasoline Explosion." *International Journal of Mass Emergencies and Disasters* 13:67-92.

Background References:

Quarantelli, E.L. 1996. "Emergent Behaviors and Groups in the Crisis Time of Disasters." Pp. 47-68 in *Individuality and Social Control: Essays in Honor of Tamotsu Shibutani*, edited by Kian M. Kwan. Greenwich, Connecticut: JAI Press.

Drabek, Thomas E. 1987. "Emergent Structures." Pp. 259-290 in *Sociology of Disasters: Contribution of Sociology in Disaster Research*, edited by Russell R. Dynes, Brune DeMarchi and Carlo Pelanda. Milano, Italy: Franco Angeli.

Forrest, Thomas. 1978. "Group Emergence in Disasters." Pp. 105-125 in *Disasters: Theory and Research*, edited by E.L. Quarantelli. Beverly Hills, California: Sage.

Kreps, Gary A., Susan Bosworth (with J. Mooney, S. Russell and K. Myers). 1994. *Organizing, Role Enactment and Disaster: A Structural Theory*. Newark, Delaware: University of Delaware Press.

Dynes, Russell R. 1970. *Organized Behavior in Disasters*. Lexington, Massachusetts: Heath Lexington Books.

General Requirements:

Overheads (19-1 through 19-8 appended).

See individual requirements for each objective.

Objective 19.1 Describe three empirically validated propositions derived from emergent norm theory (ENT) that pertain to group emergence within disaster environments.

Requirements:

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

Use Overheads 19-1 through 19-3.

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 19-1; “Workshop Tasks”.

1. Group 1 – Summarize the event studied by Aguirre and Wenger (1998) and identify four behavioral responses.
2. Group 2 – Summarize the research design, sampling procedures, and data collection techniques used by Aguirre et al. (1998).
3. Group 3 – Identify and explain four theoretical propositions based on emergent norm theory (ENT) that were tested by Aguirre et al. (1998).
4. Group 4 – Identify and explain four major findings that were empirically validated by Aguirre et al. (1998).

C. **Start** discussion.

D. **Stop** discussion.

II. Event.

A. Group 1 report: 2 minutes.

B. **Supplement** group report with the following points as required.

1. **Event:** bombing (explosion) of World Trade Center.

2. **Location:** Manhattan, New York.
3. **Date:** February 26, 1993.
4. **Remind** students of prior discussions of this attack.
 - a. See Sessions No. 4 (“Overview of Disasters and Hazards in the U.S.A. Today”; conflict disasters) and No. 5 (“Terrorism: Changing Threat Perceptions and Response Preparedness”).
 - b. **The terrorists:** Following a 6 month long trial, a jury convicted four defendants on March 4, 1994 of all 38 counts against them. Each was sentenced to 240 years in prison and a fine of \$250,000 (May 25, 1994). Authorities in Pakistan arrested a prime fugitive (February 7, 1995). Following his return to the U.S., this alleged “mastermind” of the WTC bombing was sentenced to 240 years in prison (January 8, 1998). Adapted from: Joint Terrorism Task Force. 2002. (Internet accessed: March 6, 2003: http://www.adl.org/learn/jtff/wtch_jtff.asp).

5. **Consequences:**

- a. Deaths: 6 (p. 310).
- b. Injured: unknown number (p. 310) (over 2,000 is the estimate reported in the *1994 Britannica Book of the Year*. 1994. Chicago: Encyclopaedia Britannica Inc., p. 116).
- c. Agent: van with explosives in underground parking lot (Level B-2) (p. 310).
- d. Blast crater: 170 feet wide, 180 feet long, 7 stories deep.
- e. Fires ignited; smoke into ventilation system; loss of electricity (p. 310).
- f. Evacuation of two WTC buildings (110 story towers) involving more than 25,000 people (p. 310).

III. Behavioral responses.

A. **Supplement** Group 1 report as required.

B. **Display** Overhead 19-2; “Behavioral Responses to the 1993 WTC Terrorist Attack.”

C. **Review** responses listed and **highlight** those noted in Group 1 report (Aguirre et al. 1998, p. 311).

1. Almost one-half evacuated in **large groups**, i.e., 20 or more.
2. A majority of evacuees **knew the people** with whom they left the building.
3. A majority **discussed** what needed to be done; **milling** behavior.
4. Nearly all (91%) engaged in **confirmation** behavior.
 - a. Others nearby – 26%.
 - b. Telephone – 26%.
 - c. Media – 11%.
5. Nearly all evacuees perceived others as exhibiting **controlled behavior**.
 - a. Helpful – 89%.
 - b. Rational – 96%.
 - c. Calm – 60%.
 - d. Orderly – 86%.
6. A majority **received instructions** from others.
 - a. Office personnel – 56%.
 - b. Friends – 12%.
7. Most (73%) **looked for others**.
8. The level of **perceived danger** was **higher for females** than males.
9. The level of **perceived danger** was **higher** among those **closest** to the explosion site.

IV. Research methods.

- A. Group 2 report: 2 minutes.

B. **Supplement** as required with points like these.

1. **Reconnaissance field work** (p. 306).

- a. Seek cooperation of authorities (1 researcher).
- b. Informal interviews (6 researchers) with agency personnel (43) and victims (23).

2. **Survey design and data collection** (pp. 306-307).

- a. **Nine floors** were selected randomly within each tower, stratified by height.
- b. **Questionnaires** (690) distributed to management representatives for distribution and collection.
- c. **Return rate:** 53% (n = 363).
- d. **Supplemental sampling** of Tower I due to low return.
 - 1) Additional floors selected randomly.
 - 2) Questionnaires distributed.
 - 3) Return rate: 60% (n = 86).
- e. **Final sample:** n = 415 (minus 35 respondents who were alone at time of explosion).
 - 1) Tower I = 161 (44% return rate).
 - 2) Tower II = 254 (61% return rate).

V. Theoretical propositions.

A. Group 3 report: 2 minutes.

B. **Supplement** as required with points like these.

C. **Display** Overhead 19-3; “Theoretical Propositions Tested Following 1993 WTC Terrorist Attack.”

D. **Review** each proposition listed and elaborate with direct references to text of article (assigned reading).

E. **Note:** The following are **simplified** versions of the more complex propositions formulated by Aguirre et al. 1998.

1. The **greater** the search for meaning, the **quicker** the emergence of norms and the initiation of evacuation (see p. 305).
2. The **greater** the extent of resources, the **quicker** the initiation of the evacuation (see p. 305).
3. The **longer** the search for meaning, the **slower** the agreement on a course of action (see p. 305).
4. The **greater** the amount of intergroup (see p. 305) proselitization, the **slower** the initiation of evacuation (see p. 305).

VI. Major findings.

A. Group 4 report: 2 minutes.

B. **Supplement** as required with points like these.

C. **Display** Overhead 19-4; “1993 WTC Attack: Empirically Verified Conclusions.”

D. **Review** each variable listed and elaborate with direct reference to text of article (assigned readings).

1. **Group size:** “Respondents in large groups took 6.7 minutes longer ($P = .12$) to initiate their evacuation.” (p. 312).
2. **Social relationships:** “. . . the more people respondents knew in their evacuating groups and the better they knew them the longer it took them to initiate their evacuation . . .” (p. 312).
3. **Threat perception:** “. . . if the respondents perceived the situation as serious, they began evacuating somewhat sooner . . .” (p. 314).
4. **Milling behavior:** “. . . the *greater* the extent to which the search for meaning inherent in the milling process focused upon defining the situation as a serious crisis demanding an out-of-the-ordinary response, the *longer* it took to mobilize and initiate their evacuations.” (p. 314).
5. **Visible smoke:** “. . . the greater the smoke was the quicker they began evacuating . . .” (p. 315).

6. **Injuries:** “. . . respondents who were injured as a result of the explosion tended to initiate their evacuation quicker than those who were uninjured . . .” (p. 315).
7. **Helping behavior:** “. . . people exposed themselves to great personal risk to try to rescue or otherwise help their friends and known others.” (p. 315). **Note:** this finding confirms studies reviewed in Session No. 15; “Victim Responses to Disaster” by Johnson (1988) and Feinberg and Johnson (2001).
8. **Resources:** positive relationship between the extent of resources available to groups and the amount of time it took people to begin evacuating (p. 315).
9. **Dramatist theory:** “Respondents who worked in floors with more than one firm started their evacuation later than their counterparts (b = 12.4 minutes, $p < .05$) in floors with one firm.” (p. 316).

Supplemental Considerations:

The key messages are: 1) the **group emergence** which occurs in disasters is **patterned** and 2) **awareness** of these patterns is **essential** to emergency managers when they seek to train personnel in other agencies, critique plans and procedures, or advocate more enlightened policies. Detailed analysis of the assigned reading (Aguirre et al. 1998), provides students with an enhanced **understanding** of selected aspects of emergent norm theory. This **interpretative framework** is illustrated well by the empirical findings from the WTC bombing case study. Some professors may wish to contrast **findings** from related studies, e.g., Fahy 1995 or **future study results currently in process** on the evacuation following the 911 airplane attacks on the WTC. For results from **two studies in process** (2003), contact: 1) Dr. Robyn Gershon, Mailman School of Public Health, Columbia University, New York, New York 10032 (212-305-1186) and 2) Dr. Dennis S. Mileti, Natural Hazards Research and Applications Information Center, University of Colorado, Boulder, Colorado 80309-0482 (303-492-6818).

Objective 19.2 Identify three social factors that increase the probability of group emergence following disasters.

Requirements:

Use Overhead 19-5.

Remarks:

I. Introduction.

- A. **Ask students:** “Based on your reading in the course, what types of social factors might be related to group emergence during disasters?”
 - B. **Record:** List student responses on the chalkboard.
- II. Constraints on group emergence.
- A. **Parr study (1970).**
 - B. **Explain:**
 1. **Materials** were gathered by Disaster Research Center (DRC) field teams on post-disaster responses.
 2. **Definition:** The creation of new social groups that did not exist at a prior point in time, e.g., prior to a particular disaster event.
 3. **11 disaster** events selected.
 - a. In five community responses, little or no group emergence occurred.
 - b. In six community responses, numerous instances of group emergence were documented.
 4. **The question:** what social factors differentiated these two clusters of disaster events? That is, what social factors constrain the probability of group emergence?
 - C. **Display** Overhead 19-5; “Constraints on Group Emergence.”
 - D. **Review** and illustrate factors listed on overhead and integrate with student generated list on chalkboard.
 1. **Interorganizational coordination** (Parr 1970).
 - a. The less the degree of interorganizational coordination, the greater the probability of group emergence.
 - b. “Group emergence is facilitated when there is organizational atomization of the community and a lack of overall community coordination during the emergency period.” (p. 425).
 - c. “In the emergent situations, the coordinating functions within the community were often assumed by emergent groups which

also substituted for missing or weak links in the process of communication.” (p. 425).

- d. “. . . emergent groups accomplished tasks that were not being performed by the responding organizations.” (p. 425).

2. **Organizational authority structure** (Parr 1970).

- a. The greater the lapse in organizational authority structures, the greater the probability of group emergence.
- b. Three common circumstances that cause lapses in authority structures (pp. 425-426).
 - 1) Authorities abdicate their roles.
 - 2) Delay in setting up on-scene command posts.
 - 3) Ambiguity of authority.

3. **Disaster demands** (Parr 1970).

- a. The greater the disaster demands exceed the capabilities of the responding organizations, the greater the probability of group emergence.
- b. Disaster demands are requests for or expectations of organizational response.
- c. Organizational capabilities may be reduced by damages to resources or otherwise rendered inoperable, e.g., loss of electrical power may impact communications equipment.
- d. Unmet needs give rise to new groups that fill in the gaps.
- e. “Some tasks are often so large that demands increase sharply, as in the case of an explosion which leaves a large number of casualties to be identified.” (p. 427).

Supplemental Considerations:

The **key message** of this section is that various social factors have been documented that increase the likelihood of group emergence. Some professors may wish to **expand** this section by pressing students to **formulate new hypotheses** related to group emergence. This could be initiated by comparing the **three factors** documented by Parr (1970) to those listed on the chalkboard that were **generated by students**. As discussion

continued, **additional factors** could be **proposed** by the professor or by students. Such discussion would **enhance** student understanding of the general topic.

Objective 19.3 Give two examples for each of the four types of systems defined in the DRC Typology.

Requirements:

Use Overhead 19-6.

Remarks:

I. **Exercise.**

A. **Display** Overhead 19-6; “A Model of Organized Disaster Response Systems.”

B. **Assign** student workshop groups used at the start of the session to one of the cells within the typology.

1. Group 1 – Cell 1, Type 1 systems = Established.

2. Group 2 – Cell 2, Type 2 systems = Expanding.

3. Group 3 – Cell 3, Type 3 systems = Extending.

4. Group 4 – Cell 4, Type 4 systems = Emergent.

C. **Announce task:** “I want each group to come to the assigned area of the chalkboard and quickly write the names of five example systems for your organizational type. Let’s use the responses to the WTC terrorist attacks, i.e., 1993 and 2001, as our referent events. OK. You have three minutes.”

II. **Analysis.**

A. **Remind** students that Overhead 19-6 was discussed in Session No. 16; “Non-victim Responses to Disaster.”

B. **Review** student generated examples; note errors, but ask for rationale.

C. **Supplement** with examples like these.

1. **Established systems.**

a. NYC Police.

- b. NYC Hospitals.
 - c. NYC Public Utility organizations.
2. **Expanding systems.**
- a. Red Cross chapters.
 - b. Salvation Army units.
 - c. Church welfare units.
3. **Extending systems.**
- a. Department stores (donate drivers).
 - b. Heavy equipment contractors (donate equipment).
 - c. Computer service firms (donate equipment and personnel).
4. **Emergent systems.**
- a. Non-official SAR groups.
 - b. Donation coordination groups.
 - c. Body identification groups.
 - d. Related religious ceremony planning groups.

Supplemental Considerations:

By participating in the exercise, students will **enhance** their understanding of the DRC Typology and the **diversity of systems** that characterize post-disaster environments. This section also serves as an **integrative bridge** to prior sessions. While most will choose to keep it **brief**, some professors may wish to **expand** this section by permitting more **discussion time** and use of many additional examples.

Objective 19.4 Describe two examples of elaborations or extensions of the DRC Typology.

Requirements:

None.

Remarks:

- I. Quarantelli study (1995).
 - A. **Explain:** the DRC Typology has been useful for many years and remaining so.
 - B. **New research** has documented responses that do not fit.
 - C. **Three examples** (based on Quarantelli 1996, pp. 56-60).
 1. **Quasi-emergence:**
 - a. **Definition:** temporary or minor emergence.
 - b. **Example:** “. . . in the New Orleans flood situation, routines and disaster planning in many emergency organizations called for much more intra and interorganizational communication to be conveyed by telephone. However, because of the situation in the city, such communication was hand carried – a procedure not planned for – and undertaken by personnel who had not either by traditions, routines, or plans, been visualized as playing the role of a message carrier.” (p. 57).
 2. **Structural emergence.**
 - a. **Definition:** some new structure emerged, but not as extensive as found in extending systems.
 - b. **Example:** During a flood in New Orleans, the local U.S. Weather Service, like many other organizations, lost use of telephones. “A local amateur radio club brought into the situation set up a patchwork of informal radio groups, and established contact with the Weather Service Office in Baton Rouge.” (p. 57).
 3. **Task emergence.**
 - a. **Definition:** group structure was unchanged, but a new task was completed.
 - b. **Example:** “. . . the police department in New Orleans opened two public shelters, a task that is routinely carried out by the local Red Cross chapter . . . the police department established the shelters but did not run them.” (p. 57).

- II. Drabek analysis (1987).
 - A. **Explain:** Drabek completed extensive review of literature on emergent systems.
 - B. **Expansion** of DRC Typology by adding **three additional concepts** (see pp. 269-274).
 - 1. **System permanence.**
 - a. Systems vary from “high” to “low” in their life span.
 - b. Variation could be assessed and integrated within DRC Typology.
 - 2. **Structural complexity.**
 - a. Systems vary from “high” to “low” in the complexity of their structure.
 - b. Variation could be assessed and integrated within DRC Typology.
 - 3. **Disaster Life Cycle.**
 - a. Systems vary in “time” of birth, e.g., many emerge during the response phase, but others are born during the recovery, preparedness, or mitigation phases.
 - b. Systems vary across the entire life cycle of disasters; highlights analysis into areas heretofore ignored.
 - C. **Extensions** of DRC Typology permit important **integrations** of theory and policy assessment.
 - 1. Research on emergence during **mitigation phase** has not been integrated with other disaster phases.
 - 2. Issues pertaining to **duration** of emergent systems or adaptations yielding extending or expanding systems is poorly understood.
- III. Kreps et al. study (1994).
 - A. **Research methods.**
 - 1. Reanalysis of selected data from DRC archive data base (p. 40).

2. Identification of 423 cases of organized disaster responses (p. 40).
3. Construction of measurement system for variables (pp. 49-50).

B. The structural code.

1. D – **Domains** “. . . are collective representations of bounded units and their reasons for being . . .” (p. 39).
2. T – **Tasks** “. . . are collective representations of a division of labor for the enactment of human activities . . .” (p. 39).
3. R – **Resources** “. . . are individual capacities and collective technologies of human populations . . .” (p. 40).
4. A – **Activities** “. . . are the conjoined actions of individuals and social units . . .” (p. 40).

C. Conclusions.

1. Various organizational forms reflecting differing combinations of the structural code emerged in disaster settings.
2. **Example:** “This third example of origins involves the development of a division of labor (T), the mobilization of a critical mass of individuals (T – R), the presence of conjoined actions relating to that division of labor (T – R – A), and, finally, the legitimation of what is taking place by officials of the devastated town (T – R – A – D). (p. 46).
3. Correlational and multiple regression analyses identified various laws of interaction and specified those most powerful thereby **documenting the empirical validity** of the DRC Typology (pp. 188-189).
4. “Intended or not; therefore, the DRC Typology specifies nicely a micro-macro link between the individual and social structure.” (p. 191).

Supplemental Considerations:

The **key messages** of this section are: 1) continuing research tests the limits of the DRC Typology and suggests important modifications, and 2) much new research is required on the general topics of emergence and emergent systems. **Little has been published** regarding such matters as the factors that may constrain the **lifespan** of an emergent group, how emergence may **differ across the lifecycle** of a disaster, or **how and why** emergent systems differ in their **degree of structural complexity**? These questions are but the tip of the iceberg of an **important research agenda** that begs for attention.

Objective 19.5 Describe the emergent organizational patterns among search and rescue (SAR) groups following a disaster.

Requirements:

Use Overhead 19-7.

Remarks:

I. **Case study:** Guadalajara gasoline explosion.

A. **Researchers:**

1. Benigno E. Aguirre.
2. Dennis Wenger.
3. Thomas A. Glass.
4. Marcelino Diaz-Murillo.
5. Gabriela Vigo.

6. **Notes:**

- a. Texas A & M University, Hazard Reduction and Recovery Center.
- b. Part of team that conducted WTC bombing study (assigned reading).

B. **Publication:** *International Journal of Mass Emergencies and Disasters*, 1995, Vol. 13, pp. 67-92.

C. **Event:** Gasoline explosion within sewer system from an undetected leak at the Salamanca refinery owned by PEMEX (Mexican Petroleum Corporation).

1. **Date:** April 22, 1992.
2. **Location:** Guadalajara, Mexico (Analco neighborhood; nine kilometers of city blocks impacted, p. 71).
3. **Consequence:** (1993 *Britannica Book of the Year*, p. 487).

- a. **Deaths:** 200 (estimated).
- b. **Injuries:** 1,500 (estimated).
- c. **Property:** destroyed 1,200 houses, streets, sewer and potable water systems (Aguirre et al. 1995, p. 73).

D. Research methods.

- 1. **On-site field work** (6 days, four researchers).
- 2. **Interviews** (p. 69):
 - a. **43 victims** that had been buried alive.
 - b. **22 volunteers** who participated in initial SAR.
 - c. **5 Red Cross** paramedics.
 - d. **6 neighbors** who participated in initial SAR.
 - e. **Unspecified** number with personnel from emergency organizations.

II. Emergent organizational patterns among SAR groups.

A. Display Overhead 19-7; “Patterns of Emergence: Guadalajara Gasoline Explosion”.

B. Review points listed and illustrate.

- 1. **Initial actions** (p. 78).
 - a. People residing in the areas impacted began SAR immediately.
 - b. Both injured and uninjured people participated in SAR.
- 2. **Convergence** (p. 78).
 - a. Friends and neighbors converged at scene.
 - b. Supplied information about potential victims.
 - c. Important in victim survival.

- d. “The chances of people surviving the blast were directly proportional to the presence among searchers of a person or persons who cared for the victim and knew the victim’s likely location at the time of the blast . . .” (p. 81).

3. **Impact area:** (pp. 78-79).

- a. Divided among various SAR groups.
- b. Volunteers were integrated into these groups.

4. **Task division:** (p. 79).

- a. Tasks were divided among SAR groups.

b. **Examples:**

- 1) Disconnection of gas tanks in damaged homes.
- 2) Control of pedestrian traffic.
- 3) Removal of rubble.
- 4) Victim transportation.

5. **Unplanned:** (pp. 80-81).

- a. “This division of labor among the various agencies was unplanned prior to the explosion.” (p. 80).
- b. Written disaster plan existed, but had not been implemented.
- c. “Interagency cooperation and coordination emerged from the bottom up rather than the top down.” (pp. 80-81).

6. **Controversy:** (p. 71).

- a. Heavy equipment arrived at the scene very quickly.
- b. “Presumably, the machines actually killed people who were buried alive.” (p. 71).
- c. “Many persons opine that the equipment was moved into the impacted zone very quickly to cover up the extent of the explosion . . .” (p. 71).

Supplemental Considerations:

The **key message** of this section is to enhance student understanding of **group emergence** through an additional case study. While some professors may wish to keep this section **brief**, others may **expand it greatly** through discussion of **contrasts** to the **two WTC attacks**, other SAR research, e.g., Drabek et al. 1981, and identification of basic emergency management issues, e.g., rapid movement of victims from the scene by unofficial helpers, liability matters, etc. Such discussion could **transition** into the final section of this session.

Objective 19.6 Discuss the relevance of an understanding of emergent systems for emergency managers.

Requirements:

Use Overhead 19-8.

Remarks:

- I. Introduction.
 - A. **Ask students:** “Given your reading and our discussion today, what do you see as the key lessons for emergency managers? Why is a knowledge of emergent systems during disaster responses relevant to emergency management?”
 - B. **Record:** List student responses on the chalkboard.
- II. Lessons for emergency managers.
 - A. **Display** Overhead 19-8; “Lessons for Emergency Managers”.
 - B. **Review** and illustrate points listed; integrate with student generated examples listed on chalkboard.
 1. **Emergent groups will form.**
 - a. Examples:
 - 1) WTC bombing (Aguirre et al. 1998).
 - 2) WTC airplane attacks (Adler 2002).
 - b. Such emergence has been documented repeatedly (Drabek and McEntire 2003).

- c. Use as a **resource**, before they become a problem **source** (Drabek and McEntire 2003).

2. **Identify core leaders.**

- a. Core leaders of on-scene SAR groups can be identified quickly (Forrest 1978).
- b. Rapid identification can enhance coordination (Drabek and McEntire 2003).

3. **Speed of mobilization.**

- a. Community resources can be mobilized more quickly (Forrest 1978).
- b. Coordination among emergent groups and other responding systems can be enhanced more quickly. (Drabek and McEntire 2003).

4. **Rapid absorption of volunteers.**

- a. Legitimation of emergent groups by leadership of key responding systems, e.g., fire and law enforcement, can lead to more rapid absorption of them. (Forrest 1978).
- b. Respect for and temporary absorption of emergent systems permits improved coordination and control by established disaster organizations (Drabek and McEntire 2003).

5. **DRC Typology: Training tool.**

- a. Useful for emergency managers in training (Drabek and McEntire 2003).
- b. Underscores scope, diversity, and complexity of disaster responses (Drabek and McEntire 2003).

6. **Debunk disaster myths.**

- a. Refutes exaggerated images of panic and victim helplessness (Drabek and McEntire 2003).
- b. Emphasizes active, goal-directed behavior by victims and unofficial helpers (Drabek et al. 1981).

Supplemental Considerations:

It is desirable that students make a firm **link** between the **elements of theory**, e.g., emergent norm theory, the DRC Typology, and emergency management **applications**. This session, and especially this section of it, provide a **unique opportunity** for professors to accomplish this critical objective. Additional **student discussion**, including suggestions that they share relevant examples from their individual case study book assignment, can **enhance** the **quality** and **effectiveness** of this section. As student participation and interest produce more examples of these and other lessons for emergency managers, the **depth** of their learning will increase.

Course Developer References:

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