



Disasters and Localities

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INTRODUCTION

- Risk to disasters is increasing
- Population growth will inherently result in an increase in places prone to disasters
- It is the essential role of government to manage events of significance



The international community faces a series of threats each year that causes thousands of deaths and costs billions of dollars in disaster aid, disruption of commerce, and destruction of homes and critical infrastructure.

CONCEPTUALIZING DISASTERS

DISASTER - a deadly, destructive, and disruptive event that occurs when a hazard interacts with human vulnerability

HAZARD - source of danger that poses a threat to life, health, property, or the environment

RISK- the susceptibility to death, injury, damage, destruction, disruption, stoppage, etc.

VULNERABILITY - proneness of people to hazards and risk based on varying factors as demographics and location, etc.

HAZARDS ETIOLOGY

Natural Hazards

- Rooted in natural environment
- Considered acts of God
- Not preventable
- Associated with perceived *lack of control*

Manmade Hazards

- Caused by humans
- Result of human intent, negligence, error, or system failure
- Not predicted, thought to be preventable
- Identifiable parties to be held accountable
- Associated with perceived *loss of control*

DETECTING HAZARDS

- Process of identifying what hazard is about to occur, or what disaster has just taken place
- Each is different and requires various methods of detection
- Initial measures for detection center on the six serving men

CONSIDERING THE AGENTS

- Primary - natural agent that interacts with vulnerabilities and produces a disaster
- Associated - natural agent that produces a hazard that occurs at the same time as a primary hazard
- Secondary - natural or manmade hazard that occurs as a result of a primary hazard

IDENTIFYING THREATS

- **NATURAL**

→ Atmospheric, Geologic, Hydrologic, Seismic, Biological, Environmental

- **MANMADE**

→ Structural Collapse, Nuclear, Technological, Transportation, Civil Conflict, High Threats

ASSESSING RISK

- Risk assessment is the determination of value of risk related to a concrete situation and a recognized threat
- Risk management is the measurement of the potential loss and probability of occurrence
- Quantitatively, risk assessment is the likelihood of occurrence x seriousness
- Qualitatively, risk assessment is to follow IEEDDI

DETERMINING VULNERABILITY

- Geographic location
- Demographic factors
- Other factors

FRAMING DISASTERS TODAY

- Disasters are socially constructed phenomena – occur locally
- Consequences of disasters are often broad-based, long-term, and unanticipated
- Examining the connection between social capital and political trust is paramount:
 - Political trust is especially vulnerable
 - Social capital can be easily weakened
 - Remediation strategies have consequences

ROLE OF GOVERNMENT IN DISASTERS

- Modern society relies upon government for effective response to and recovery from disasters
 - It is the essential role of government to manage events of significance
 - Assist with disaster declarations
 - Provide public and individual assistance
 - Activating federal response plan
 - Assist with emergency support functions

RESPONSIBLE PARTIES

- **Elected officials and civic leaders**
- **Public servants**
- **Local and national planning and response agencies**
- **Emergency managers**
- **First responders**

- Private sector companies
- Nonprofit organizations
- Volunteer organizations
- Faith-based organizations

SERVING THE PUBLIC

- Emergency managers build capacities to help reduce the risk associated with hazards as well as develop measures for disaster resiliency
- First responders serve as an extension of emergency managers to assist with activating measures to reduce the damage associated with disasters

EMERGENCY MANAGEMENT

- The discipline of avoiding risks to hazards and dealing with both natural and manmade disasters in an effort to lessen their impact
 - Practical application rooted in public administration and public safety
 - Process orientation of developing policies and programs
 - Pendulum of activities or cycle-based framework
- Began in mid 1980s
- Considered an academic field and community of practice



<p><u>1. Mitigation</u></p> <p>Preventing future emergencies or minimizing their effects</p>	<p>Includes any activities that prevent an emergency, reduce the chance of an emergency happening, or reduce the damaging effects of unavoidable emergencies.</p> <p>Buying flood and fire insurance for your home is a mitigation activity.</p> <p>Mitigation activities take place before and after emergencies.</p>
<p><u>2. Preparedness</u></p> <p>Preparing to handle an emergency</p>	<p>Includes plans or preparations made to save lives and to help response and rescue operations.</p> <p>Evacuation plans and stocking food and water are both examples of preparedness.</p> <p>Preparedness activities take place before an emergency occurs.</p>
<p><u>3. Response</u></p> <p>Responding safely to an emergency</p>	<p>Includes actions taken to save lives and prevent further property damage in an emergency situation. Response is putting your preparedness plans into action.</p> <p>Seeking shelter from a tornado or turning off gas valves in an earthquake are both response activities.</p> <p>Response activities take place during an emergency.</p>
<p><u>4. Recovery</u></p> <p>Recovering from an emergency</p>	<p>Includes actions taken to return to a normal or an even safer situation following an emergency.</p> <p>Recovery includes getting financial assistance to help pay for the repairs.</p> <p>Recovery activities take place after an emergency.</p>

ON RESPONSE AND RECOVERY

- Theoretical debate over where response ends and recovery begins
- Long lasting effects with high costs
- Decisions to rebuild homes, replace properties, resuming employment, restoring businesses, and repairing infrastructure
- Multiple actors involved – political leadership, business community, government, citizens, etc.

TRAGEDY OF THE COMMONS, P1

- Facing adversity – demand immediate attention for deaths, injuries and property destruction
- Image production – immediate information may be inaccurate or misleading
- Compressed time – pressures to act quickly or prematurely are immanent
- Tragic choice – helping one may result in the death of another

TRAGEDY OF THE COMMONS, P2

- Fuzzy gambling – full extent of impact may not be known for hours, days or even weeks
- Strain and stress – physical and emotional demands are so excessive that impair judgment
- Group processes – interaction of multiple agents often leads to suboptimal results

OTHER CONSIDERATIONS

- Initiating the emergency operations center
- Employing a public affairs officer
- Engaging the media
- Identifying special/vulnerable populations
- Managing donations
- Organizing volunteers
- Assessing damage
- Eliminating debris
- Managing recordkeeping
- Minimizing liability

WHERE WE ARE LEFT

Challenges Remain

- Crisis-reactive approach
- Hazard zone attraction
- Fragmented systems perspective

Decision Remedies

- Designing preferable models
- Situational awareness
- Think critically
- Try to return to a period of normalcy as quickly as possible

DISASTERS IN VIRGINIA

- VDEM protects the lives and property of Virginia's citizens from emergencies and disasters by coordinating the state's emergency efforts
- As an elected official, you have influence
 - Disaster response begins at the local level
 - Reaching out to the local emergency manager should be the first step



CURRENT VIRGINIA ENVIRONMENT

- Since last September, there have been a number of disasters:
 - Hurricane Matthew
 - Oceana Fuel Spill
 - Congressional Baseball Attack
 - Charlottesville Riots

Discuss Ready Virginia Document

Future Prescriptions

It has become important for leaders to ask/answer questions of *why*, *where*, and *why there*

Policymakers have attempted to reduce the impacts associated with disasters by anticipating the unexpected.

Given the limited opportunities for crisis-related experience, “decision-making, mental models, and situational awareness research on [crises] have highlighted a further need for effective emergency management.

Local authorities are becoming the force multipliers for state and federal officials in addressing new threats.

Administration is determined
ACTION taken in pursuit of a
conscious *PURPOSE*. It is the
systematic *ORDERING* of affairs and
the calculated use of resources
aimed at making those happen
which one wants to happen.

~*KARL MARX*



Thank You and Questions

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