

Hurricane Katrina and Policy Development: Effects of the Storm

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Faculty

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Program Objectives

- Describe the policy development process and the role of policy in protecting public health.
- Name some pre-Katrina policies and why they failed.
- Construct a suggested post-Katrina policy response and rationale.

Policy Development Process and the Role of Policy in Protecting Public Health

- Policy Concept Constructs:
 - Definition: “definite course or method of action selected from among alternatives and in light of given conditions to guide and determine present and future decisions.” Webster’s Collegiate Dict., 10th Edition.

Policy

- Policy is informed by data from the assessment of actual or potential problems.
 - Informed choices:
 - Application of the best idea.
 - Alternatives.
 - Guiding principles.
 - Action.
 - Desired goals.

Policy

- Policy is, therefore, a body of norms that captures and applies health-promoting knowledge products to public benefits.

Policy

- **Policy could be in the forms of:**
 - **Legislation**
 - **Regulations (via rule-making powers)**
 - **Directives (e.g., Executive Order, enforcement orders of an administrative body)**
 - **Guidelines for compliance or achieving standards**

Public Health

- **Health: "A State of complete physical, mental and social wellbeing and not merely the absence of disease or infirmity." - WHO, 1997.**
- **Public – Population as opposed to an individual.**
- **Public Health – Population Health.**

Rational For Public Health Policy

- **Policy**
 - **Defines**
 - **Validates**
 - **Sustains**
 - **Distributes the benefits**
 - **Enforces**

Policy Development Process

- **Participants:**
 - **Government (Federal, State and Local): legislature, agencies**
 - **Communities via their representatives**
 - **Corporations**
 - **Professional organizations**

Policy Development Process

- **Policy triggers:**
 - **Contaminated water or air, or soil**
 - **Flooding**
 - **Vector infestation**
 - **Poor sanitation**
 - **Damage to health infrastructure**
 - **Mold, debris and waste disposal problems, etc.**

Policy Development Process

- **Policy targets**
 - **Pollutants**
 - **Industrial facilities**
 - **Products**
 - **Land use practices**

Policy Development Process

- **Basis for establishing policy standards (control measures):**
 - Health risk
 - Resource use (e.g., desired water quality)
 - Technology
 - Cost-benefit

Policy Development Process

- **Alternatives consideration**
- **Consider each alternative utilizing criteria such as:**
 - The health risk presented.
 - Effectiveness of a particular alternative in minimizing the risk, compared to others.

Policy Development Process

- **Alternatives consideration**
 - The population affected
 - Economic cost of a particular alternative, compared.
 - Time factor for implementing a particular alternative, compared.
 - Short term or Long term alternatives, or both.

Policy Development Process

- **Alternatives consideration**
 - Invite and consider the stakeholders' inputs.
 - Allow debate of the alternatives.
 - Select and justify the best alternative(s). Justify the rejection of the others.
 - Communicate the policy decision to the public.
 - Develop guidelines for applying the policy as appropriate.

Policy Development Process

- **Policy-making levels**
 - Federal: e.g., Setting NAAQs
 - States: e.g., Implementation of NAAQs via the SIP
 - Local: e.g., Land use planning

Examples of Policy Standards

- **Design standards, e.g., sanitary landfills under the RCRA.**
- **Performance standards via tech under the CAA & CWA.**
- **Ambient Air standards for criteria pollutants under the CAA.**

Examples of Policy Standards

- Emergency planning and response standards, for e.g.,
 - 1) The responsibilities of the state and local authorities under the EPCRA.
 - 2) The reporting and notification requirements under the EPCRA.
 - 3) The spills/leaks, fire or explosion response under the HMTA.

Examples of Policy Standards

- Information Disclosure, for e.g., the Toxic chemical releases reporting under the EPCRA; info access under the FOIA.
- Liability Rules, for e.g., the “no fault” liability regime under the CERCLA.

Examples of Policy Standards

- Taxes/incentives for pollution control tech, or benign energy sources.
- Food Sanitation and Safety Standard: e.g., Hazard Analysis Critical Control Point Plan (HACCP).

Examples of Policy Standards

- Environmental Impact Statement under the NEPA.
- Public participation requirement in decision making under the NEPA.
- Judicial review of agency rule-making action.

Policy Development Process

- Policy effectiveness: A function of knowledge and skill.
 - Level 1 Society: Poor knowledge. No skill.
 - Level 2 Society: Good knowledge. Unskillful.
 - Level 3 Society: Better knowledge. Skillful.
 - Level 4 Society: Superior knowledge. Superior skills.

Pre-Katrina Failed Policies - Examples

- Emergency Preparedness and Response:
 - First Failure: Constitutional division of powers held more rigidly than situation on the ground demanded.

**Pre-Katrina
Failed Policies - Examples**

- Emergency Preparedness and Response:
 - Second Failure: Emergency preparedness not yet a culture of the society; proactive measures largely absent, e.g.
 - Reserves for Hospitals
 - Location of critical resources
 - Coordinated evacuation of Hospitals and Nursing homes

**Pre-Katrina
Failed Policies - Examples**

- Wetlands and Coastal Areas Management.
 - Wetlands benefit public health via
 - Water quality protection
 - Buffers against storms
 - Flood control (sponge)
 - Stress-relieving outdoors
 - Habitat for flora and fauna

**Pre-Katrina
Failed Policies - Examples**

- A history of Wetland destruction:
 - Conversion to agric land.
 - Urbanization, highways.
 - Oil drilling/pipelines.
 - Canal construction and dredging.
 - Construction of flood protection levees.
 - Pollution.

**Pre-Katrina
Failed Policies - Examples**

- Wetland Management Measures:
 - Swampbuster provision of the Food Security Act.
 - S. 404 of the Clean Water Act.
 - The Coastal Barrier Resource Act.
 - Federal flood laws.
 - The Coastal Wetlands Planning, Protection and Restoration Act.

**Pre-Katrina
Failed Policies - Examples**

- Wetland Management Measures:
 - Hypoxia control and best farming practices in the MARB.
- Failure: Public health not yet a major driver of wetland management: poor policy connection between wetland health and public health.

**Pre-Katrina
Failed Policies - Examples**

- Land Use Practices:
 - Land uses were largely economic driven:
 - Oil refineries and chemical plants in the wrong places.
 - Hazardous waste disposal sites in floodplains and wetlands.
 - Incentives for development in flood hazard areas.

**Pre-Katrina
Failed Policies - Examples**

- Land Use Practices:
 - Land uses were largely economic driven:
 - City/Community master plan not oriented toward public health protection as a core objective.
 - Limited use of local authority police power in public health protection.
- Failure: Economic considerations trump public health protection.

**Pre-Katrina
Failed Policies - Examples**

- Sanitation
 - HACCP, state and local sanitary laws are some of the measures promoting good sanitation.

**Pre-Katrina
Failed Policies - Examples**

- Failure:
 - No HACCP rigors for small/medium food establishments purely for economic reasons.
 - Reactive inspection to complaints, not proactive to assure compliance.
 - Funding and personnel deficits.
 - Penalties not deterring enough.

**Suggested Post Katrina
Policy Response:**

Emergency Preparedness

- Consider Gulf coast hurricane/flood a national security issue.

**Suggested Post Katrina
Policy Response:**

Emergency Preparedness

- Develop a culture of emergency preparedness through public awareness and education. Legally mandate teaching it at:
 - Public and private schools and colleges.
 - Workplaces.
 - Religious centers.
 - Centers providing human services.

**Suggested Post Katrina
Policy Response:**

Emergency Preparedness

- Create an info clearinghouse and command center to oversee and standardize emergency preparedness for all hospitals and nursing homes.

**Suggested Post Katrina
Policy Response:**

Emergency Preparedness

- Require hospitals in the region always to maintain a certain amount of oxygen, clean water, and auxiliary power reserves and to locate these above the ground level.
- Require Hospitals to elevate the housing of critical equipments, medical records, pharmacy.

**Suggested Post Katrina
Policy Response:**

Wetlands and Coastal Areas

- Legally make public health protection a core objective of wetland management.

**Suggested Post Katrina
Policy Response:**

Wetlands and Coastal Areas

- A shift in wetland policy from “no net loss” to restoring and improving wetlands is appropriate but tax:
 - Wetland destroying activities such as OCS oil drilling, pipelining, navigable canal dredging, pollution.
 - Corporate profit from activities affecting wetland viability.

**Suggested Post Katrina
Policy Response:**

Wetlands and Coastal Areas

- Revenues from such taxes to be invested in restoring and improving the health of wetlands. (Restoring Louisiana coastal wetlands alone is estimated to cost \$14 billion).

**Suggested Post Katrina
Policy Response:**

Wetlands and Coastal Areas

- Impose moratorium on permitting non-wetland restoring projects, regardless of whether they will have passed the NEPA review process.
- Construct flood control levees in a way that complements nature and not oppose it.
- Consider closing some canals and maximizing the use of others.

**Suggested Post Katrina
Policy Response:**

Wetlands and Coastal Areas

- Intensify wetland restoration projects such as freshwater diversion to wetlands, and vegetation growing efforts.
- Condemn private developments in high risk floodplain in exchange for government land in non-flood areas and some compensation.

**Suggested Post Katrina
Policy Response:**

Wetlands and Coastal Areas

- **Mandatory participation in NFIP by all communities in the Gulf Coast whether in the SFHA or not.**
- **Buy back all private structural developments in CBRS and OPA and make no exceptions. Withdraw public utility services from these areas and, as much as possible, convert the areas to natural forested lands.**

**Suggested Post Katrina
Policy Response:**

Land Use Practices

- **Legally make public health protection a core objective of land use planning.**
- **Public health departments should have veto powers on land use matters.**
- **Orient city/community master plans toward public health protection – providing a framework for a proactive exercise of police and zoning powers.**

**Suggested Post Katrina
Policy Response:**

Land Use Practices

- **Tie federal funding of local and state projects to feds oversight of enforcement of local zoning and building ordinances.**

**Suggested Post Katrina
Policy Response:**

Land Use Practices

- **Ban new refineries and chemical plants in the Mississippi River corridors and near the coast. Hold existing ones to a higher standard of pollution control and emergency preparedness.**

**Suggested Post Katrina
Policy Response:**

Land Use Practices

- **Require more advance spill/emission containment technologies and round the clock spill containment experts for industries in the region during the months of June to October. In return, give limited tax relief to defray the cost of compliance.**

**Suggested Post Katrina
Policy Response:**

Land Use Practices

- **Intensify best management practices for the use of pesticides and fertilizers on farmlands, especially from June to October.**

Suggested Post Katrina Policy Response: Sanitation

- **Guarantee in state constitutions and local government charters the capability of state and local public health departments to perform the ten essential services of public health.**
- **Legally assure adequate funds to perform the essential services.**

Suggested Post Katrina Policy Response: Sanitation

- **Consider public health taxes on all corporations and food businesses.**
- **Provide enough skilled personnel for routine proactive compliance inspection.**
- **Require mold-free certificate prior to reoccupation of flooded homes and businesses.**
- **Consider making penalties more deterring.**

References

- CDC's National Public Health Performance Standards Program, 2005
- www.phf.org/performance
- Environment-US Wetlands Loss Left Gulf Coast Naked to Storm, ipsnew.net/news.asp (per: R. Twilley, Director, Biochemistry Institute, LSU, 2005).
- "A Failure of Initiative: Final Report of the Select Bipartisan Committee to Investigate the Preparation for and Response to Hurricane Katrina" Feb. 15, 2006 (U.S. Gov. Printing Office, Washington, D.C.
- The Impact of Federal Programs on Wetlands – Vol.II, www.foi.gov/oepc/wetlands2
- The Times Picayune of Feb. 10, 2006
- www.wvltv.com/local/northshore
- Citizen's Guide to Environmental Activism in Louisiana (Tulane Environmental Law Clinic, 1992, pp.10-4 to 10-7; per: Lisa K. Kaas)
- www.epa.gov/iaq
- Answers to Questions About the NFIP (FEMA, 2004)
- Greater New Orleans Health Planning Group, "Framework for a Healthier Greater New Orleans." Nov. 10, 2005
- Bring New Orleans Back Health & Social services Committee, "Report and Recommendations to the Commission." January 18, 2006
- www.hhs.com
- NGA Center for Best Practices – <http://preview.nga.org>
- <http://fb.com/news/nr/nr99>
- Committee for Environmental and Natural Resources, "Integrated Assessment of Hypoxia in Northern Gulf of Mexico. Washington D.C., 2000"
- Presidential Report on Wetlands, 2005 (American wetlands website)

Upcoming Programs

**Culturally and Linguistically Appropriate
Healthcare Services For Latino Patients
Wednesday, March 15, 2006
2:00 - 4:00 p.m. (Central Time)**

**Radiological Terrorism: Clinical and
Public Health Aspects
Thursday, March 16, 2006
12:00 - 1:30 p.m. (Central Time)**

**For complete listing of upcoming
programs visit: www.adph.org/alphntn**