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Chapter 1
Hurricane Katrina, Public Health, and Law Enforcement

Introduction

Hurricane Katrina struck the Gulf Coast at 115-130 mph and hit Mississippi, Louisiana, and Alabama bringing with it walls of water as high as 27 feet on August 29, 2005. This surge of water broke through the levees and flooded the at least 80% of New Orleans, wreaking havoc on the city and its residents (Waple, 2005).

Hurricane Katrina is one of the worst natural disasters in United States history, taking 1300 lives, displacing two million others, destroying 300,000 homes, and causing nearly $100 billion in property damage (Teitelbaum & Wilensky, 2013). While the country took efforts to alleviate the damaging effects of Katrina, the consequences of the disaster were amplified by a lack of coordination from the government, inability to follow through with emergency response plans, and a delayed response to the complications of the disaster. The emergency response from the government and public health is one that we can learn from to hopefully be more prepared for disasters of this magnitude in the future and prevent an already terrible situation from escalating to even worse.
Chapter 2

Response Efforts

**Governmental Response**

Response efforts to the disaster of Hurricane Katrina included all forms of government, non-governmental organizations, charities and individuals, as well as international efforts. The Federal Emergency Management Agency (FEMA) deployed search and rescue teams, disaster medical assistance teams, disaster mortuary operational response teams, and veterinary medical assistance teams (Plyer, 2013). FEMA also worked in conjunction with the Department of Transportation to deliver supplies like ice, water, and meals to those in need. The Department of Transportation also sent mobile homes and forklifts to help displaced persons. The Department of Homeland Security, Department of Education, Environmental Protection Agency, Department of Energy, and Department of Labor all took steps to help the recovery of those affected. Varying local governments from all over the country also offered support in the form of ambulances, search and rescue teams, disaster supplies, and shelter facilities. The Department of Homeland Security states that 11,500 lives were saved, and 25,000 citizens evacuated because of these efforts (Skinner, 2006).

**Other Organizations and Charities**

The American Red Cross also played a large role in relief efforts. Local chapters and volunteers helped to provide shelters, meals, emergency response vehicles, and raised donations toward disaster aid. Tens of thousands of volunteers were organized and deployed to disaster regions to offer relief to victims of Katrina. By the end of September the American Red Cross had raised nearly one billion dollars to support relief efforts. There were many other
organizations and charities including America’s Second Harvest, Camp Hope, and the United Methodist Church that helped to respond to the disaster (Skinner, 2006).

**Public Health Response**

The United States Public Health Service was activated as well to respond to medical needs. The Centers for Disease Control and Prevention (CDC) worked with the Food and Drug Administration (FDA), the National Institutes of Health and the Substance Abuse and Mental Health Services Administration. These agencies and organizations worked together to send staff to affected areas to provide drugs and medical supplies, develop public health and occupational health guidance, issue recommendations for handling drugs affected by the flooding, and provide medical consultation and mental health counseling assistance to those in need (Teitelbaum & Wilensky, 2013).

The CDC Foundation also provided several grants to various health departments directly affected by Katrina as well as states housing a large population of evacuees. These funds helped to replace destroyed facilities, repair damaged ones, and restore health services as well as offer new ones like crisis hotlines (CDC Foundation, 2014).

The government’s response followed the traditional approach in times of natural disaster: focusing on sanitation, water safety, surveillance and infection control, environmental health and access to care. What the government failed to address were the specific challenges that Hurricane Katrina brought with it. Some of these unique challenges included how to care for those with chronic disease conditions, how to access medication, death and illness from dehydration, and mental health problems among those who were displaced (Teitelbaum & Wilensky, 2013).
Chapter 3

Lessons Learned

Problems with Response Efforts

There were many things that could have been done differently to lessen the impact of Hurricane Katrina. Some of these things include preventive efforts, as well as better reactionary and responsive efforts. Warnings of the hurricane went unheeded, the levee system faltered, and local and state officials failed to properly prepare for the disaster even though it was made clear that a hurricane the magnitude of Katrina was inevitable (Skinner, 2006). Evacuations were not possible for everyone advised to do them, and the lack of coordination between government officials on all levels was detrimental and aggravated the time sensitive situation. Failing lines of communication like phone lines, cell phone towers, and radio and satellite antennae were damaged or destroyed in the storm making it very difficult to have a coordinated effort to respond to Katrina and resulted in a delayed response to victims in need of help. There was also a lack of clear leadership during the crisis.

There was chaos among the victims from Katrina as well. People were looting and not trusting of governmental authority. There were also scam artists pretending to collect donations and money to support relief efforts but in reality many were illegitimate and never went to support relief efforts (Townsend, 2006).

In addition to things that could have been within the government’s control, there was also extensive damage to many state and local public safety agency’s equipment and facilities from the storm which was out of their control. Even if these agencies were prepared to respond to Katrina, they couldn’t do so when their means to offer support was compromised. Flooding prevented access to many law enforcement and fire dispatch centers as well (Townsend, 2006).
Policy Changes

Recognition of the response problems and delays lead to the revision and creation of several policies pertaining to emergency preparedness with the Post-Katrina Act. FEMA was reorganized and their mission, function and authority was clarified in relation to the Department of Homeland Security. Most of the policy revisions related to granting FEMA enhanced authority and responsibility as well as imposing new requirements regarding the operations of the agency. Leadership within FEMA was also reorganized: job qualifications were clarified, some positions were abolished and new ones were added as modifications made to existing positions to enhance the leadership team. There were also provisions pertaining to reporting requirements and training and education regarding emergency preparedness. The Post-Katrina Act also maintained that federal officials may not seize firearms in the state of an emergency that are legally owned or require their registration (Bea, 2007). I believe that the revision of these policies and the creation of new ones will help to have a better response to emergencies in the future. Since we cannot predict the future it is difficult to be fully prepared for whatever emergency may present itself but it seems as though these revisions should help to clarify responsibilities of organizations and different levels of government to have a coordinated and timelier response than with Hurricane Katrina.
Chapter 4

Summary and Recommendations

Summary

While the response efforts to the damaging effects of Hurricane Katrina were extensive, there is plenty of room for improvement in the event of a similar situation in the future. A wide range of governmental and non-governmental agencies and organizations in addition to public health, charities, and individuals helped to alleviate and offer support to many victims of Hurricane Katrina. Unfortunately however, our country lost hundreds of people and valuable resources that could have potentially been saved had we had a more coordinated, concerted and planned response to the event. Obviously we cannot predict the future, but hopefully we can learn from the past and prepare better in the future to save valuable lives and better utilize resources available.

Recommendations

I believe that all levels of government need to coordinate to have a concerted plan as to how to handle a natural disaster like Hurricane Katrina. The response efforts were so disconnected that it slowed victims receiving lifesaving care costing lives in the delay. Each level of government should know their role in the event of a natural disaster and have clear lines of communication. Each organization should have clear assignments regarding what their role is and how their role coincides with other efforts being made. An emergency response plan should include all potential lines of response in order to save time if these methods of relief or response need to be utilized. An emergency response plan should be comprehensive and expect the worst to be prepared for the worst. This way if something falls short or exceeds expectations the country can be as prepared as possible. I also believe that there should be a coordinating agency
to ensure that each other line of government or organization is prepared to do their part in a potential response effort.

Public health entities providing medical care should regularly check inventory to make sure they have disaster supplies on hand and are readily stocked in the event of a disaster. There should also be routine drills and revision of emergency plans so that all staff and personnel can be familiar and prepared to handle a disaster.

I also believe that it would be helpful to have some governance regarding when certain regulations can be waived or surpassed when a response is time sensitive and urgent. This could entail waiving certain approval or wait times in the event where a response could save lives. Each entity should be familiar with which guidelines and/or rules can be overlooked in this instance, and which ones need to be adhered to no matter what. I also believe that having more individuals in charge of waiving these rules or responsible for coordinating efforts would be helpful. Each organization offering services should also be familiar with services and efforts that other organizations are taking in order to have a coordinated and seamless response.

I also think that there needs to be a decided method of communication to the public about the government’s response efforts. There needs to be transparency about what is going on so that individuals can trust the efforts of the government. There need to be backup methods of communication in the case that some lines of communication are down.
REFERENCES


