

# Development of disaster plan in my community term papers examples

[Business](#), [Management](#)



Introduction: Hurricanes are common disasters in US causing maximum damage in the coastal community. They are the worst and costliest of all national disaster and can sometimes extends to areas far away from the coast. Hurricanes are defined as giant, spiraling tropical storms, with a wind speed of over 160miles/hr. Force generated by the storm, can cause catastrophic damage to houses, buildings and causes landfall. It can kill humans, animals and destroy natural landscape. (Parker & Shapiro, 2008)

Hurricanes in US, has its origin ether in Atlantic or eastern Pacific Ocean. Hurricane season in Atlantic, begins in June and ends in November. Hurricanes in eastern Pacific begins in May and ends in November. The coast-line along south eastern regions of US are most affected. Hurricanes have a multidimensional impact on political, social, economic, and environmental components of a community. (Parker & Shapiro, 2008)

Hurricanes are classified into categories based on the degree of damage they cause. Category one hurricane causes low degree damage to few trees, shrubs and weak buildings. Category 2 is slightly stronger, and it can blow of trees and damages the roofs of most houses and buildings. Category 3 is capable of completely destroying mobile homes, can blow down large tress and damage small building. Hurricanes with a wind speed above 131 miles per hour are categorized as 4 and 5. Both these hurricanes can cause extensive damage, blow away trees and buildings. They are often accompanied by torrential rainfall that is capable of causing floods that adds to the damage. Strom surge and tornadoes are often associated with hurricane attacks. (Parker & Shapiro, 2008)

## **Need for Disaster Management Plan:**

Vulnerability to a hurricane attack can be reduced by proper disaster management plans in risk prone communities. The management efforts are most successful when the local people or potential victims are directly involved in the management programs. The best time to start disaster management is well before an attack by hurricane. It is good to be ready and prepared to face an unavoidable calamity.

Forecasting a hurricane is the first important step in managing hurricanes. The national hurricane center (NHC) of the country is responsible for forecasting hurricanes. Data from satellites, reconnaissance aircraft, ships, buoys, radar, and land based platform tools are used in the forecasting process. Data from different observatories, are processed by supercomputers that gives an approximate prediction of a hurricane attack. NCA can predict a tropical cyclone, 72hours to 48 hours before its formation. The information is then communicated to public, through broadcasting outlets like: radio, television, internet, newspapers. Identifying hazard, can help to initiate plans to reduce loss. The next step is to prepare or take steps to face the imminent disaster.

The main aim of disaster preparedness plan is to minimize loss of life, livelihood and property. This can be achieved with help of community led help groups. Involvement of technology, along with social and economic changes can benefit the vulnerable community in facing the challenges associated with disasters. Use of alternate energy sources and change in community behavior are important in managing disaster. (Raum, 2012)

Managing a disaster is a three level approach, in which the first level

involves local authorities. They are responsible for the management of disasters in their jurisdiction. If only the disaster is too large and unmanageable by the local authorities; state and federal authorities respond. (Raum, 2012)

### **Community Task Force in Disaster Management:**

The community or local administrations in disaster prone areas, must have well-trained and ready to serve task force. Given below are different task forces and their key response during a disaster. (Johnson, 1998)

1. Coordination and planning task force: This force is responsible for early warning, response and recovery operation.
2. Administration and Protocol task force: This task force will help in disaster operations by completing paper work and other administrative tasks that are needed for effective and timely assistance.
3. Warning task force: is concerned with the collection and dissemination of warning on disaster.
4. Law and order task force: is concerned with maintain law and order in affected areas.
5. Search and rescue task force: provides humans and materials needed to support evacuation, search and rescue efforts.
6. Public works task force provides personnel and resources to reestablish infrastructures in the affected region
7. Water task force assures the supply of portable drinking water for human and animal consumption.
8. Food and relief supplies task force, assures provision of sufficient food and

other relief to the affected community.

9. Power task force helps to reestablish power supply to the affected community.

10 Public health and sanitation task force addresses pressing public health problems and helps to reestablish normal health care system during disasters.

11. Animal health task force takes care of animals affected by disaster.

12. Shelter task force provides materials and supplies to establish temporary shelters in disaster affected population.

13. Logistics task force provides air, water and land transportation facilities for evacuation of people and for the storage and delivery of relief supplies.

14. Survey and damage assessment task force collects and analyses data on the impact of disaster and provides estimate on resource needs and relief plan. The report compiled by this department is used by other departments and the state authorities.

15. Telecommunication task force ensure the coordination and operation of all communication systems like radio, TV, phone, wireless communication, that are required for early warning and for the post disaster operation.

16. Media and public information task force provides assistance to print and electronic media on early warning, disaster reporting and post disaster reporting.

Additional task forces can be formed based on the need and based on specific situations that can arise. The task force helps at the operational level. Planning, logistic, finance and administration sections provide assistance to the task force. It is always advantageous to have local

members in the task force.

They most vulnerable people in the high risk area can be first relocated. A clear action plan should be made and people or groups should be assigned to each task force member. (Johnson, 1998)

### **Evacuating the House During a Hurricane:**

Once a hurricane is expected, one has to decide on remaining inside house or evacuating the area and moving to a safer shelter. Unlike other disasters, large areas are evacuated during hurricanes. Hurricanes can blow away trees, houses, animals, humans and objects. The debris and objects floating in the wind, are the main cause of injuries during hurricanes. Hurricanes can also cause landslides, causing people to be trapped under the fallen debris. Category 2 hurricanes, may not require large scale evacuation, as strong houses can withstand the wind force. However, if evacuation is required one must be prepared to adapt and face the situations. (Raum, 2012)

It is a good practice for all the family members to come together and go over the emergency plan: Keep the yard clean; Remove bikes, lawns, furniture's, grills, tanks and other materials that could be carried away by the storm and damage the house. These items can be kept inside a room. The outer windows and door in a house need to be closed. One can nail plywood, or use storm shutters to keep the door closed. Doing this can prevent the shattering of window glass and prevent the glass pieces from harming people. Turn off the power when you notice flooding along the power line or when you have to leave the house. Store sufficient nonperishable food and drinking water in closed containers. Keep your car ready and tank filled with

gas. Cars should have an emergency kit. Cars should be moved under cover or kept in garage. (Raum, 2012)

If you are staying at house during a disaster, keep listening to news and radio for the latest news. Flying debris are the most common cause of injuries during hurricanes. Stay away from windows and stay in room that has no window or stay in the closet. Getting into the bathtub and covering oneself with plywood can also offer protection. If evacuation signal is provided, take only things that you really need: cell phone, medicines, license and cash. Turn off the gas, water and electricity of the house. Take the route suggested by the emergency or disaster workers, even if it is the most crowded route. (Raum, 2012)

### **Community Plan for Disaster Management:**

Communities in disaster prone area can take initiatives to protect sources of clean drinking water. They also plan the meeting point and temporary shelters during emergencies. Community members must be prepared to mitigate and adapt to the disaster. Local community leaders are chosen and they can be given clear and concise orders on how to act before the hurricane. The following are few inventory that can help in preparing the community before a disaster.

Physical space or a safe community facility must be arranged. This space or facility must be selected keeping in mind the population size and their requirements. In a high risk area, the local authorities and the community can plan and build the space, well in advance.

The next step is to provide a public or private transportation facility to shift

people from risk prone area to safe places. Boats and helicopters may be required in the evacuation process.

First aid and the medical facilities must be well equipped to treat injuries and accidents associated with hurricane. Hurricane can also make situation difficult for pregnant women, children and elderly. At individual level, a person suffering from specific diseases must procure and store medicine in advance.

Rescue teams must be formed. Involve the local community members in the process. The team members need to be trained and well equipped to deal with disaster. There must not be any shortage of shovel, fire extinguishers, ladders, rope, pick-axes, axes, and chain saws, all of which will prove useful in times of hurricane.

Failure of electricity is common in all disaster. Alternate source for energy supplies like flash lights, generators, gas burner can be arranged.

### **Sufficient quantity of safe drinking water and food must be stored for post disaster management.**

Plan alternate method of waste and sewage disposal. This is very important, as many post disaster deaths are associated with cholera and dysentery arising from water contaminated from human waste.



## **Have a complete contact and information list of NGOs and authorities who can be approached for help during the disaster.**

Security system of the community must be well prepared to ensure safety to all community members. Looting of abandoned homes and business are common during disaster.

### **Always be ready:**

The occupants in a disaster prone area must have individual level preparation to face a hurricane. The first 72 hours before a hurricane is the informative phase, where all occupants in the hurricane prone area are alerted by local community level personal, local media, news, radio and television broadcasting. Occupants of hurricane prone area should be ready with a 72 hours emergency kit. The emergency kit is a back pack or duffel bag or plastic bag that contains enough water, non-perishable food, vitamins and minerals for three days. In addition, first aid kit and medicines for special needs; personal care product; portable device for cooking, warmth and lighting; map showing evacuation route, GPS, book containing emergency numbers; sanitation supplies like bucket, sanitary pads, portable toilets; extra bag suitable for the weather and bedding; emergency radio and self-defense tools. Pack important documents like will and passport with you. Individual or family members must know the route and contact number of the nearby shelter. It is also important for everyone in the community to be aware of the warning siren and known what to do when it goes off.

The local authorities must evaluate correctly the extent of damage and loss, and seek state or federal help if necessary. Taking precautions and being

prepared can help reduce the confusion that happens after a hurricane. Local level emergency management officials must be first prepared and also encourage and ensure that the community is well prepared to face the impending hurricane. Usually a 72 hours delay is noticed, before a federal, state and local response to hurricane. This delay can cause serious consequences. Better planning can help handle this delay. The trajectory and progress of storm must be notified to the community. Evacuation and relocating people to higher ground can start 72 to 48 hours prior to attack. Evacuation center must be readied by this time. During the evacuation process, pregnant women, children and elder are given priority. Electricity is cut down, when the storm start rising above 40 hours / mile. This will help to prevent deaths from electrocution. Safe food, portable water and medicine must be made available at the evacuation center. The 24 hours disaster plan begins, ones the storm has started blowing and the damage has started. The relocation of people must be completed by this time. Twenty four hours period is called the hurricane warning phase.

### **Role of Communication in Disaster Management:**

Establishing a good community communication and information system are very important in risk prone areas. If the communication facilities or communication infrastructures are collapsed, it will have a disastrous effect on disaster management and the situation will become unmanageable. Radio communications are very important during floods and hurricanes. Each volunteer group can communicate at a frequency different from the other group. Telephone and other methods of communication are likely to be

destroyed during hurricanes. The local task force must ensure immediate restoration of communication facilities and ensure uninterrupted communication. (Raum, 2012)

### **The 72, 48 and 24 hours plan of public health and sanitation task force:**

The following is a disaster management plan for public health and sanitation task force that is concerned with ensuring and restoring proper health care during the disaster (Brennan, 2009):

1. Before the disaster:

#### **Develop inventories of personals, facilities and resources in the task force**

Provide training to task force members.

Establish control room and communication facilities.

Be prepared to handle seasonal diseases.

Identify areas vulnerable to hurricane.

Create public awareness on disaster and ways to manage the disaster.

2. Warning phase:

This could be the first 72hrs, or 48 hrs. depending on the type of hurricane.

#### **The local task members must warn the occupants about an approaching hurricane.**

The health facilities must also send out warning.

Mobilize health personals to the disaster area.

Hours prior to the disaster establish medical camps and tents.

The medical task members at the community level must be alerted.

### 3. During disaster:

#### a. Immediate plan

#### **Within one hour of disaster, begin first aid efforts.**

Within 6 hours of disaster, establish the status of the health care system.

Within 2 to 4 hours of disaster begin coordinating efforts with control room and other task force.

Within 1 hour of disaster, begin referral of the injured people to an upper level facilities. Also implement the SOP for management of the deceased.

#### b. 12 hours after the disaster

Call outside resources for help. This involves telecommunication and contacting the logistic task force and the control room.

Establish temporary medical facility centers at places where help is needed.

This will require coordination with public work task force, power task force, water task force and law and order task force.

#### **Expand the surveillance.**

Develop health care recovery plan.

It is important to clearly define the action and also assign personnel who should do it.

#### c. 48 hours after the disaster:

At the beginning of the 48 hour period, establish a formal health care reporting. Also start solid waste and vector control management.

## **Give specific focus on the health care surveillance of children 0 to 5 years of age.**

Create public awareness on health problems associated with disaster.

d. 72 hours after the disaster:

Begin the demobilization effort. Gather a meeting to discuss on the lesson learned during disaster and submit a report.

## **Psychological and social help during disaster:**

Disasters are particularly traumatic for children and youth. The effect of disaster on their mind can be long lasting and depressing. It undermines their sense of security and normalcy. Children look to adult for guidance, on how to react to disasters. Panic and physical exhaustion have been reported in children who had prior exposure to hurricanes. Though most children cope up after the disaster, few experience post traumatic disorder, especially when there has been loss of loved ones, loss of homes and incurred personal injuries. Such children may grow up into adults with psychiatric problems and suicidal tendencies. Children with post traumatic disorder must be referred for mental health evaluation and intervention. (Sutter, n. d.)

According to the national association of insurance commission, more than 45% of householder do not have insurance, nor inventory of the items they possess. It is a good practice to take photograph of your possession and retain receipts that will help identify your possession once the disaster passes. The occupants are left behind, with the task to rebuild what is destroyed or lost in the disaster. Having an insurance coverage will help cover the cost and reduce burden. (Sutter, n. d.)

## **Conclusion:**

Natural disasters like hurricane can threaten one's health. Though taking precautions and evacuation can help avoid injuries associated with hurricanes, restoring the health care system to normalcy after a disaster is a challenging task. Food and water safety are important concerns post-disaster. Do not use spoilt food. Drink water that is sterilized by boiling, for drinking and cooking purpose. Infants are particularly vulnerable to contaminated water and food. Extra precautions may be necessary in their cases. Never use an electrical device that is wet. Use flash light and candles and keep away from anything that can catch fire. Strange noises from the building could mean that it is going to fall. In such circumstances, leave the building. Do not use gas or coal burning equipment's inside your home as they create carbon monoxide. Keep away from flood water. Move around flood water and not through it.

While cleaning the house or building, wear safety gears and protective clothing. When the environment is dusty, use breathing mask. Silica, asbestos and lead are high in the dust, around fallen buildings. Stay away from pest and wild animals. If possible, try cleaning and drying your house within 24 -48 hours. Never bleach closed spaces. Disinfect toys that have come in contact with flood water. Plumbing, roofs and wall should be fixed as soon as possible.

People and animals in shelters must be provided with necessary basic amenities and medical aid. Medical, mortuary and veterinarian facilities are much sought after, during disasters. The hospital must be well stocked and sufficient beds and gurneys must be planned and made available during

times of disaster. The risk of water borne and food borne diseases are high during a disaster. A team should be always prepared to provide surveillance, immunization and help the local public health situation to return to normal. Sufficient stock, delivery, distribution and access to vaccines: Influenza, diphtheria, tetanus, Hepatitis A and Hepatitis B vaccine must be made available. Mental health support to survivors is very important during such disaster. Psychiatric facilities will help to treat people affected with post traumatic disorder. It is also good to ensure that spiritual practices are held at local religious centers, as they can offer moral support to the victims.

Abstract: Hurricanes are giant spiraling tropical storms and are common along the southeastern borders of US. Hurricanes in U. S, originate in Atlantic or Pacific Ocean. The states bordering these oceans are at the risk of facing hurricane disaster. Hurricanes can destroy cities, cause land fall, uproot trees, shrubs and building. Hurricanes kill people and destroy homes. The degree of damage associated with hurricanes, depend on the strength or the velocity of wind. Category 2 hurricanes have a velocity less than 131 miles per hour. The extent of damage is usually less than category 3 and 4. A community that is well prepared to face a disaster is less vulnerable to the damaging effects of hurricane. Hurricane prone area have task forces that help the local community members in facing, mitigating and adapting to the effects of disaster. Disaster management plan discussed in this paper provides details on hurricane warning, evacuation, being protected inside once house and disaster management. The success of disaster management plan depends on effective communication and also on the involvement of local members in the management efforts. Different public service

department set up task forces, headed by a commanding officer, to help the affected community. Health care and public sanitation department's task force carry out disaster management assistance in different stages: Early phase, warning phase, during disaster, 24, 48 and 72 hour post disaster health care management. Efforts of the health care team, will help restore normalcy to the community.

## **References:**

- Brennan, V. (2009). *Natural disasters and public health*. Baltimore: Johns Hopkins University Press.
- Johnson, J. (1998). PLANNING FOR DISASTER. *Chem. Eng. News*, 76(49), 36-38. doi: 10. 1021/cen-v076n049. p036
- Parker, C., & Shapiro, S. (2008). *Climate chaos*. Westport, Conn.: Praeger.
- Raum, E. (2012). *Surviving hurricanes*. Chicago, Ill.: Raintree.
- Rubonis, A., & Bickman, L. (1991). Psychological impairment in the wake of disaster: The disaster-psychopathology relationship. *Psychological Bulletin*, 109(3), 384-399. doi: 10. 1037/0033-2909. 109. 3. 384
- Sutter, D. *Ensuring Disaster: State Insurance Regulation, Coastal Development, and Hurricanes*. SSRN Journal. doi: 10. 2139/ssrn. 1350550