**Module two Assignment**

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**Discuss the principles of emergency preparedness**

The fundamental **principles of emergency Preparedness** are based on four phases – mitigation, **preparedness**, **response** and recovery. ... Building and maintaining our incident command and crisis action teams is the focus of our **Preparedness** activities.

Prevention and mitigation programs aim to reduce the likelihood or consequences of emergencies by changing the community or the environment in which the hazard exists. Such programs can involve structural strategies, for example the building of dikes or the strengthening of buildings, or could be non-structural, for example land use planning or economic diversity during the**Mitigation** phase, we conduct an annual hazard mitigation risk assessment that identifies those hazards we judge to be most critical and need our efforts to focus on in the upcoming year. By concentrating our efforts in these areas, we reduce the risk to the University’s students, faculty and staff.

**Preparedness** programs enable organizations and communities to deal with emergencies effectively and appropriately. They strengthen capacity and capability through intersectional and sectional planning processes Building and maintaining our incident command and crisis action teams is the focus of our **Preparedness** activities. Training the staff members in emergency management procedures, developing emergency response and Continuity of Operations plans, conducting table-top and full-scale exercises, as well as participating in the Storm Ready Program while maintaining our (BU) Alert emergency notification system are a few of the things we do to better prepare the University for a response to an emergency when it occurs.

You can also be part of our Preparedness efforts by taking the BU Managing Emergencies course on Blackboard. The better prepared you are for an emergency, the better prepared the University is to respond. So Get Rhetty!

Our initial **Response** is comprised of the men and women of our Facilities Management and Planning, Environmental Health and Safety and Public Safety Departments. Boston University has a great working relationship with public emergency response organizations in Boston and Brookline if and when they’re needed.

The objective of the **Recovery** phase is to get the campus back to normal (the way things were before the emergency) as soon as possible. Time and time again, whether it’s snow storms, floods or fires, the incident command and response teams have met this objective. Working with the Mayor’s Office of Emergency Management and the Massachusetts and Federal Emergency Management Agencies, we feel confident that if additional resources are needed to address large scale emergencies or disasters, that assistance will be on the way quickly.

Below are some of the principles derived from the lesson of emergency preparedness in the above discussion:

Is the responsibility of all; meaning members of a community, community resources and the organizations and administrative structures of a community, should form the foundation of any emergency preparedness program.

Should be woven into the community and administrative context, and be undertaken at all administrative levels of both government and non-government organizations; meaning **Emergencies** affect the security and well-being of communities. So the responsibility for maintaining the security and well-being of a community rests primarily with the individuals that make up a community.

is an important aspect of all development policy and strategies; meaning its ensure policies and practices that allow for self-determination and maximum community involvement in response and recovery planning;

should be based on vulnerability assessment; meaning people should collect data based on the hazard arise in the community and the dissemination of information related to particular hazards in that community

is connected to other aspects of emergency management; meaning its promote community awareness and education to minimize risk and increase preparedness

should concentrate on process and people rather than documentation; meaning allow the use of local knowledge and expertise;

should not be done in isolation; meaning its provide opportunities for participation in decisions which are made in relation to a community by all the members who are task for the particular assignment;

Should not concentrate only on disasters, but integrate prevention and response strategies for any scale of emergency. Promote community awareness and education to minimize risk and increase preparedness.

**With the help of a diagram describe the emergency preparedness process**

**An emergency preparedness process**

An emergency preparedness process is a series of techniques for preparing a community, an organization, or an activity for emergencies.

Each part of process is outlined below, and further explained in the following passages.

**Policy development** includes the development of emergency management legislation. Legislation is normally developed by a national government, and will mainly relate to responsibility for emergency preparedness and special emergency powers. There is also a need for central government, provincial and community organizations to develop subsequent policies. Similarly, non-government organizations that have emergency management responsibilities should develop appropriate policy.

**Vulnerability assessment** can be used to determine:

Which parts of a community are vulnerable to hazards and in what ways;

which hazards may affect a community, and how they affect it;

which aspects of the community should be modified to decrease vulnerability; and,

Which hazards should be considered for emergency prevention and preparedness.

A vulnerability assessment is also useful for response and recovery, as well as for prevention and preparedness, where it can be used to:

Suggest areas that may sustain damage, and assist in measuring harm to the affected community;

Provide a baseline for recovery strategies, in that it will describe the ‘normal’ state of a community.

**Emergency planning** consists of determining:

response and recovery strategies to be implemented during and after emergencies;

responsibility for these strategies;

the management structure required for an emergency; and,

The resource and information management requirements.

**Training and education** concerns training personnel in emergency management skills and knowledge, and informing the community of the actions that may be required during emergencies and how the community can participate in emergency management.

**Monitoring and evaluating** are methods for determining how well the preparedness program is being developed and implemented, and what needs to be done to improve it.

Why use a process for emergency preparedness? We need to use a rational process for a number of reasons:

firstly, if a rational process is not used, it is likely that some important aspects of preparedness will be missed; and,

secondly, to explain to others what is being done, and how they can participate;

thirdly, to justify the validity of the results it is necessary to demonstrate that a thorough analysis has been performed, and the use of a rational process is part of this justification.

This is particularly important when seeking funding for emergency management. This process should ideally be begun from the first step, and each step should be followed consecutively. Information from each step is used in subsequent steps.

1. The complex nature of our business means we must be prepared to respond to a range of possible disruptions. Potential threats come in many forms such as major accidents, political instability or extreme weather. We maintain a strong emphasis on training to develop effective emergency response capabilities. If a spill or other unplanned event occurs, we have plans and processes in place to ensure we can respond effectively. We also conduct thorough investigations of all significant incidents to understand the root cause, share lessons learned and prevent future incidents. We report on our spill performance annually.
2. Because we place great value on having trained and capable emergency responders, we conduct various training events and multiple exercises each year for our global operations in compliance with company standards and local regulatory requirements, including the [U.S. Oil Pollution Act](https://www.epa.gov/laws-regulations/summary-oil-pollution-act). In addition, regional training and exercises are conducted to evaluate business unit, regional and corporate incident management systems. In 2018, these regional exercises were conducted in the United Kingdom, Indonesia and Alaska (Polar Tankers). Training targeted areas of emergency response requiring additional focus, including leadership in the response planning process, improving capabilities related to resource ordering, Incident Command System (ICS) position-specific training, and oil spill response tactics. Lessons learned and best practices from key exercises are shared within our internal emergency response community to further enhance our capabilities.

3. **Discuss three potential impacts of emergencies on communities and the immediate response/intervention for each**

**Three potential impacts of Emergencies on communities and the immediate response for each are:**

**Economy**

**Infrastructure**

**Environment**

**And are discuss in details in the below passages**

**Economy**

The economy is a part of the community that requires protection. Consider the implications of a major disaster on investments and tourism. It is likely that an emergency that causes considerable structural and environmental damage would devastate the local tourism industry. Investment may also suffer, due to a perception on the part of potential or current investors that the risks in the area are too high. Industries and trade could also suffer due to a restriction in the access to both goods and markets caused by disruption to transport and communications. The wealth of a community may also determine its ability to sustain harm, or resilience.

**Infrastructure**

The infrastructure (both physical and organizational) of a community is often highly vulnerable to hazards, particularly natural emergencies. A vulnerability assessment should consider any possible damage to power generation and distribution systems, water supplies, communications systems, etc. These are often referred to as ‘lifelines’, and factors relevant to them are:

the existence of risk management systems;

the effects of loss of the service on the community;

the possible extent of damage;

alternative means of supplying the service;

the amount of time repairs would take; and,

The cost of repairs.

Of particular relevance to the health sector is the hospital system. It is also important to have a basic description of the government structure, and service and community organizations, as these will provide the mechanism for emergency management programs and strategies.

**Environment**

The environment can be defined as the natural surroundings, and includes plants and animals, water, air and soil. If any of these elements of the environment are damaged, other elements might also be affected, due to the inter-connectedness of all parts of the environment.

We need to protect our environment to ensure a viable future for us all. Many hazards can adversely affect the environment, including chronic (that is continuous and low level) or acute (sudden and high level) pollution by hazardous materials. The environment also determines the settlement patterns and lifestyles of communities.

Paradoxically, the environment that nurtures us also causes some of the biggest threats - natural hazards. Indeed, describing the environment in a vulnerability assessment will often identify some hazards that haven’t yet been considered.

4. It is important to communicate with the public in anticipation of a disaster. Describe the communication process identifying all those involved in the process.

Communications concerns the means of relaying information between organizations, people, and the community. Adequate communications is essential to all aspects of response and recovery operations. In terms of electronic communications, the system should allow:

coverage from community to provincial and national levels, both within and between organizations;

primary reliance on existing systems and compatibility between organizations’ systems;

dedicated frequencies for command, control and coordination;

back-up systems and back-up power supplies; and,

simplicity of activation and operation

Information management and communication should be part of planned design and execution, and be integral to an organization’s risk and disaster management plans. Improvised communication can be costly and have unsatisfactory results.

In addition to having specialized training, persons responsible for information management and communication must be open and proactive. The ability to generate and exchange information is not exclusive to those who have studied communication; rather, it comes from a hands-on approach and good team work.

Teamwork is essential if information management and communication are to be successful. Disaster experts, communicators, or administrators cannot work in isolation and the work of those with one specialization should complement the work of the others. Those responsible for communication must have a strong understanding of disasters. Likewise, experts in disaster management and public health will make better decisions when they accept input from communication specialists.

Investment in information management and communication is a cross-cutting endeavor and should be integral to the work of disaster management experts and organizations. Information management and communication should be considered a culture more than a skill.

Finally, this guide aims to be dynamic and encourage participation. It will be perfected as long as communication and disaster experts put its principals into practice and help to improve on the recommendations presented here.

**Define the term hazard,**

 “A **hazard** is any source of potential damage, harm or adverse health effects on something or someone.” Harm – physical injury or damage to health. **Hazard** – a potential source of harm to a worker. Or In the context of emergency management, hazard can be defined as any phenomenon which has the potential to cause disruption or damage to humans and their environment.

**What is the difference between hazard exposure and hazard vulnerability?**

**Hazard Exposure** refers to people, property, systems, or other elements present in hazard zones that are thereby subject to potential losses. While **Hazard Vulnerability** describes the characteristics and circumstances of a community, system or assets that make it susceptible to the damaging effects of a **hazard**. Or **Hazard Vulnerability** is the result of a number of factors that increase the chances of a community being unable to cope with an emergency. Not all sections of a community are vulnerable to hazards, but most are vulnerable to some degree. Vulnerability consists of two aspects - **susceptibility** and **resilience**. Susceptibility concerns the factors of a community which allow a hazard to cause an emergency, e.g. living in an earthquake-prone area or the level of development of the community. Resilience is the ability of a community to withstand the damage caused by emergencies, includes all the factors that allow a community to respond to and recover from emergencies.

**List and define the four phases of emergency managemen**t

* the ‘comprehensive’ phase approach;
* the ‘all hazards’ phase approach;
* the ‘multisectoral and intersectoral’ phase approach; and,
* the ‘prepared community’ phase approach

**Comprehensive emergency phase management** entails developing and implementing strategies for different aspects of emergency management, i.e. prevention/mitigation, preparedness, response and recovery, in the context of sustainable development. These aspects are not discrete, sequential phases, but overlap each other both in time and in scope.

Prevention and mitigation programs aim to reduce the likelihood or consequences of emergencies by changing the community or the environment in which the hazard exists. Such programs can involve structural strategies, for example the building of dikes or the strengthening of buildings, or could be non-structural, for example land use planning or economic diversity.

Preparedness programs enable organizations and communities to deal with emergencies effectively and appropriately. They to strengthen capacity and capability through intersectoral and sectoral planning processes. Response and recovery1 are strategies implemented during and after emergencies that have specific humanitarian and social objectives. Effective emergency preparedness programs ensure that response and recovery strategies lead to enhanced development. Emergencies may be viewed as a ‘springboard’ for development, in that they may create a situation where resources can be applied to improve the conditions of communities.

The management of emergencies is a process which should be part of the normal development plan of a country. Emergencies should not merely be responded to when necessary - the causes should be analyzed, and preventative programs and response and recovery strategies should be developed and implemented.

**The all hazards phase approach** concerns developing and implementing emergency management strategies for the full range of likely emergencies. This approach is useful because different hazards and emergencies can cause similar problems in a community, and such measures as warning, evacuation, medical services and community recovery are usually required during and following emergencies. Many hazards will, however, cause emergencies that require specific response and recovery measures, and will almost certainly require specific prevention programs.

**The multi-sectoral and inter-sectoral phase approach** means that all organizations, including government, private and community organizations, should be involved in emergency ‘Relief’ and ‘rehabilitation’ are subsets of response and recovery. The context of emergency management for specific organizations varies, and may include:

* protecting their own interests and personnel;
* protecting the community from hazards arising from the activities of the organization; and,
* providing a public service to protect the community from credible hazards.

If this approach is not used, emergency management is likely to be fragmented and inefficient. The multisectoral and intersectoral approach will also help to link emergency management to sustainable development, through the institutionalization of emergency management and the use of its principles in development projects.

A key constraint of the multisectoral approach is that emergency management does not duplicate normal government administration.

**The concept of the prepared community phase approach** concerns the application of the comprehensive, all hazards, and multisectoral and intersectoral approaches at the community or local level (typically the lowest level of government).

Emergencies affect the security and well-being of communities. The responsibility for maintaining the security and well-being of a community rests primarily with the individuals that make up a community. External assistance in emergency management may be expected, but should not be relied upon. Members of a community, community resources and the organizations and administrative structures of a community should form the foundation of any emergency preparedness program. Community participation in emergency management should:

* allow the use of local knowledge and expertise;
* promote community awareness and education to minimize risk and increase preparedness
* provide opportunities for participation in decisions which are made in relation to a community;
* ensure policies and practices that allow for self-determination and maximum community involvement in response and recovery planning;
* ensure cooperation between professional personnel and volunteer members of the community;
* make use of the existing structures, resources, and local networks wherever possible;
* make use of the community’s own material and physical resources, in particular, local suppliers;
* promote active participation in the community’s recovery; and,
* enable national and international organizations to channel resources directly to the community.

**References**

1. Including the [U.S. Oil Pollution Act](https://www.epa.gov/laws-regulations/summary-oil-pollution-act). In addition, regional training and exercises are conducted to evaluate business unit, regional and corporate incident management systems.
2. In 2018, these regional exercises were conducted in the United Kingdom, Indonesia and Alaska (Polar Tankers).