E9: Disaster Management

Module 4

Planning for emergencies

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Module 4

Planning for emergencies

Introduction

Module 4 focuses on emergency preparedness and planning. This module provides a practical overview of emergency planning with emphasis on the all-hazards/common consequence approach. The learner will also learn how to develop contingency plans as well as the importance of business continuity plans. Community preparedness is also discussed as a critical component to good emergency preparedness practice.

Outcomes

Upon completion of this module you will be able to:

- *describe* the all-hazards/common consequence approach to emergency planning
- *explain* when and how to develop a contingency plan
- *explain* and develop business continuity planning
- *describe* community resilience
- *discuss* why it is critical to work with communities in developing preparedness and disaster reduction plans
- *describe and adopt* good practices to promote public and household preparedness.

Unit 8

Planning for emergencies

Introduction

Unit 8 focuses on emergency preparedness and planning. The module provides a practical overview of emergency planning with emphasis on the all-hazards/common consequence approach. The learner will also learn of how to develop contingency plans.

Upon completion of this unit you will be able to:

Outcomes

- *explain* the "all-hazards/common consequence" approach to emergency planning
- *explain* when and how to develop an emergency plan
- *develop* a basic emergency plan.

Terminology

Terminology

Catastrophe	An event in which a society incurs, or threatens to incur, such losses to persons and/or property that the entire society is affected and extraordinary resources and skills are required, some of which must come from other nations.
Command	The act of directing, ordering, or controlling by virtue of explicit statutory, regulatory, or delegated authority.
Complex emergency	A humanitarian crisis in a country or region where there is a breakdown of authority resulting from internal and/or external conflict and which requires an international response that exceeds the capacity or mandate of any single agency (IASC, 1994).
Comprehensive emergency management	An integrated approach to the management of emergency programmes and activities for all four emergency phases (mitigation, preparedness, response, and recovery), for all types of emergencies and disasters and for all levels of government and the private sector.
Concept of operations (EOP)	The concept of operations will capture the sequence and scope of the planned response, explaining the overall approach to the emergency

	situation. The concept of operations should include division of responsibilities, sequence of action, how requests for resources will be met, and who and under what circumstances will requests be made for additional aid.
Consequence management	Involves measures to alleviate the damage, loss, hardship, or suffering caused by emergencies. It includes measures to restore essential government services, protect public health and safety, and provide emergency relief to affected governments, businesses and individuals.
Co-ordinate	To advance systematically an analysis and exchange of information among principals who have or may have a need to know certain information to carry out specific incident management responsibilities.
Crisis	A situation that, left unaddressed, will jeopardise the organisation's ability to do business.
Crisis management	Measures to identify, acquire and plan the use of resources needed to anticipate, prevent, and/or resolve a threat or act of terrorism.
Disaster	A serious disruption of the functioning of society, causing widespread human, material or environmental losses which exceed the affected community's coping capacity (UN, 1992). Disasters are usually larger in scale than emergencies.
Disaster management:	The process of forming common objectives and common values in order to encourage participants to plan for and deal with potential and actual disasters.
Emergency	An unplanned event that requires the immediate co-ordination of services to protect the health, safety or welfare of a community, or to limit damage to property or the environment (Public Safety Canada, 2005).
Emergency planning	The process involving activities undertaken by individuals and organisations prior to a disaster to enhance their ability to effective response to that disaster. (This term is occasionally used interchangeably with 'emergency preparedness'.)
Incident	An occurrence, either human-caused or by natural phenomena, that requires action by emergency service personnel to prevent or minimise loss of

	life or damage to property and/or natural resources.
Incident Command System (ICS)	The combination of facilities, equipment, personnel, procedures, and communications operating within a common organisational structure with responsibility for management of assigned resources to effectively direct and control the response to an incident. Intended to expand as the situation requires greater resources without requiring new, reorganised, command structures.
Planning	The Webster Dictionary defines planning as "to arrange the parts of; or to have in mind." Planning links knowledge to action.
Preparedness	Activities designed to minimise loss of life and damage, to organise the temporary removal of people and property from a threatened location and facilitate timely and effective rescue, relief and rehabilitation.
Recovery	Those long-term activities and programmes beyond the initial crisis period of an emergency or disaster and designed to return all systems to normal status or to reconstitute these systems to a new condition that is less vulnerable.
Response	Activities to address the immediate and short-term effects of an emergency or disaster. Response includes immediate actions to save lives, protect property and meet basic human needs.
Spontaneous evacuation	Residents or citizens in the threatened areas observe an emergency event or receive unofficial word of an actual or perceived threat and without receiving instructions to do so, elect to evacuate the area. Their movement means, and direction of travel is unorganised and unsupervised.
Vulnerability	The extent to which a community, structure, service or geographic area is likely to be damaged or disrupted by the impact of a particular disaster hazard, on account of their nature, construction, and proximity to hazardous terrain or a disaster-prone area.
Vulnerability analysis	Identifies what is susceptible to damage. Should provide information on: extent of the vulnerable zone; population, in terms of size and types that could be expected to be within the vulnerable zone; private and public property that may be damaged, including essential support systems and

transportation corridors; and environment that may be affected.

Emergency planning

Emergency management is the process through which disaster preparedness and/or mitigation strategies are tested. The process is graphically represented as the "Preparedness Cycle" (Figure 1).

The phase immediately after the disaster is the most critical in terms of saving the maximum number of lives in the least amount time. Emergency preparedness is planning for actions during the response phases.

The benefit of preparing an emergency plan is undisputed. The crucial factors are:

- the way it is drafted
- the sustainability and feasibility of the plan
- the level of knowledge and awareness of the plan that the key participants have
- the flexibility of the plan itself
- the amount of time and attention dedicated to test the plan.

Figure 1: The Preparedness Cycle.

Source: US Federal Emergency Management Agency (FEMA) Comprehensive Preparedness Guide (CPG) 101 2010

It is advisable that the emergency plan should simply aim to give basic directions on the mobilisation and the organisation of all available resources in order to be able to respond to an emergency. To ensure plans are both realistic and effective a strategic and all-hazard approach is recommended.

Strategic and all-hazards approach

Strategic approach

An organisation's operational priorities in an emergency will be to maintain situational awareness, provide oversight on all aspects of the emergency, keep the government and the public informed of the situation and provide support.

Organisations are therefore encouraged to develop policy to clearly establish the understanding and parameters of the organisation's emergency management role and responsibilities.

Organisations should develop policies, guidelines and supporting plans to specifically address their internal and external preparedness, response and recovery programmes. A strategic approach is recommended in establishing a framework for development of effective emergency management plans, programmes and activities.

The strategic approach focuses on the application of comprehensive emergency management within an integrated framework. It is designed to set out the steps to be taken by an organisation in the event of an emergency or disaster and to provide guidance on co-ordination with other organisations.

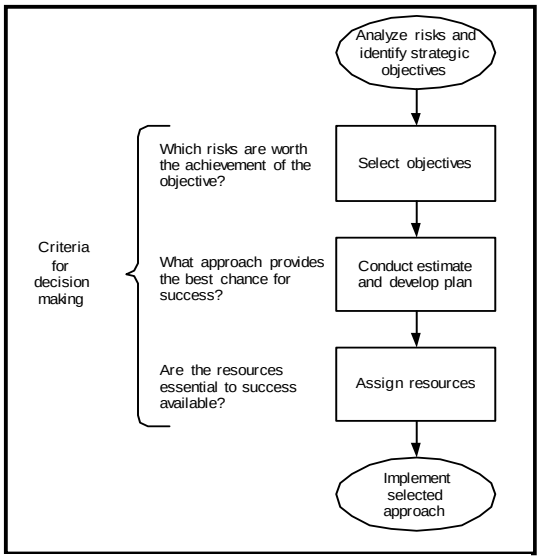

Figure 2: Selecting an emergency management structure.

In other words, it is the art of devising and employing a plan or process towards a goal. It seeks to create a desired pattern of events and represents a combination of policy and doctrine designed to facilitate a coherent and timely response. Determining a viable and affordable emergency structure to support the planned framework is an inherently complex and iterative process, as illustrated in Figure 2.

All-hazards approach

A key concept that has emerged in emergency management is the all-hazards approach**.** It is no longer sufficient (or possible) to plan for individual threats. Populations worldwide are now faced with a wide range of risks to their health and safety, ranging from potential natural and technological disasters to acts of terrorism and infectious disease outbreaks.

While it makes good sense to identify specific threats and responses to them, it is a daunting (if not impossible) task to create a specific emergency plan for every possible hazard. From the perspective of both efficiency and completeness, emergency management has adopted an all-hazards approach to planning. It should be noted that all-hazards planning does not exclude a risk-based approach that considers the probability and consequences of specific threats. The two approaches complement each other and should be used jointly as part of a comprehensive risk

management strategy. The idea behind an all-hazards approach is twofold:

1. **Emergencies and disasters have many aspects in common** in terms of the mitigation, preparedness, response and recovery needed by people, communities and organisations. It makes sense, therefore, to plan for generic sets of actions that are required when something negative happens, no matter what the cause. For example, a community might need to evacuate for any one of many possible reasons (such as a hurricane or toxic spill) and needs to have an evacuation plan applicable to any hazard.
2. **Actions taken to reduce one risk should not adversely affect another.** For example, the levees protecting the Mississippi River and New Orleans from flooding have prevented the replenishment of soils in the coastal wetlands that have provided some protection to the city. The low-lying Mississippi Delta, which buffers the city from the Gulf of Mexico, is rapidly disappearing at the rate of 65 to 75 square kilometres (25 to 30 square miles) of delta marsh per year. As shown during Hurricane Katrina, the loss of such protective mechanisms can have devastating human and health consequences.

Emergency plan

Why have emergency plans?

A definite plan to deal with major emergencies is an important element of an organisation's operational programme.

Besides the major benefit of providing guidance during an emergency, developing the plan has other advantages. It may discover unrecognised hazardous conditions that would aggravate an emergency situation and work can be done to eliminate them. The planning process may bring to light deficiencies, such as the lack of resources (equipment, trained personnel, supplies), or items that can be rectified before an emergency occurs. In addition, an emergency plan promotes safety awareness and shows the organisation's commitment to the safety of workers.

The lack of an emergency plan could lead to severe losses, such as multiple casualties and possible financial collapse or loss of the organisation's reputation.

An attitude of "it can't happen here" may be present and people may not be willing to take the time and effort to examine the problem. However, emergency planning is an important part of an organisation's business operation.

Since emergencies will occur, pre-planning is necessary to prevent possible escalation to a disaster. An urgent need for rapid decisions, shortage of time and lack of resources and trained personnel can lead to chaos during an emergency. Time and circumstances in an emergency mean that normal channels of authority and communication cannot be relied upon to function routinely. The stress of the situation can lead to poor judgement resulting in severe preventable losses.

What is the overall objective of the plan?

An emergency plan specifies procedures for handling sudden unexpected situations. The objective being to reduce the possible consequences of the emergency by:

- preventing fatalities and injuries
- reducing damage to buildings, stock, and equipment
- accelerating the resumption of normal operations.

Consideration should also be given to the potential impact to the environment and to the community.

Development of the plan begins with a vulnerability assessment. The results of the assessment should show:

- how likely a situation is to occur
- what means are available to stop or prevent the situation
- what is necessary for a given situation.

From this analysis appropriate emergency procedures can be established.

At the planning stage, it is important that several groups be asked to participate. Among these groups, the occupational health and safety committee can provide valuable input and a means of wider worker involvement. Appropriate municipal officials should also be consulted since control may be exercised by the local government in major emergencies and additional resources may be available. Communication, training and periodic drills will ensure adequate performance if the plan must be carried out.

What are elements of the emergency plan?

The emergency plan includes:

- all possible emergencies, consequences, required actions, written procedures and the resources available
- detailed lists of personnel including their home telephone numbers, their duties and responsibilities
- floor plans
- large scale maps showing evacuation routes and service conduits (such as gas and water lines).

Since a sizable document is likely to result by such an analysis, the plan should provide staff members with written instructions about their particular emergency duties.

The following are examples of the parts of an emergency plan. These elements may not cover every situation in every organisation but serve to provide a general guideline when writing an organisation's workplace-specific plan:

1. Objective

The objective is a brief summary of the purpose of the plan, that is, to reduce human injury and damage to property in an emergency. It also

specifies those staff members who may put the plan into action. The objective identifies clearly who these staff members are since the normal chain of command cannot always be available on short notice. At least one of them must be on the site at all times when the premises are occupied. The extent of authority of these personnel must be clearly indicated.

2. Organisation

Two individuals should be appointed and trained to act as a primary emergency co-ordinator and a "back-up" co-ordinator. Personnel on the site during an emergency are key in ensuring that prompt and efficient action is taken to minimise loss. In some cases it may be possible to recall off-duty employees to help, but the critical decisions must be made immediately.

Specific duties, responsibilities, authority and resources must be clearly defined.

Among the responsibilities that must be assigned are:

- reporting the emergency
- activating the emergency plan
- assuming overall command
- establishing communication
- alerting staff
- ordering evacuation
- alerting external agencies
- confirming evacuation complete
- alerting outside population of possible risk
- requesting external aid
- co-ordinating activities of various groups
- advising relatives of casualties
- providing medical aid
- ensuring emergency shut-offs are closed
- sounding the all-clear
- advising media.

The above list of responsibilities should be completed using the previously developed summary of countermeasures for each emergency situation. In organisations operating on reduced staff during some shifts, some personnel must assume extra responsibilities during emergencies. Sufficient alternates for each responsible position must be named to ensure that someone with authority is available onsite at all times.

External organisations that may be available to assist (with varying response times) include:

- fire departments
- mobile rescue squads

- ambulance services
- police departments
- telephone company
- hospitals
- utility companies
- industrial neighbours
- government agencies.

These organisations should be contacted in the planning stages to discuss each of their roles during an emergency. Mutual aid with other industrial facilities in the area should be explored.

Pre-planned co-ordination is necessary to avoid conflicting responsibilities. For example, the police, fire department, ambulance service, rescue squad, company fire brigade, and the first aid team may be on the scene simultaneously. A pre-determined chain of command in such a situation is required to avoid organisational difficulties. Under certain circumstances, an outside agency may assume command.

Possible problems in communication have been mentioned in several contexts. Efforts should be made to seek alternate means of communication during an emergency, especially between key personnel such as overall commander, on-scene commander, engineering, fire brigade, medical, rescue and outside agencies.

Depending on the size of the organisation and physical layout of the premises, it may be advisable to plan for an emergency control centre with alternate communication facilities. All personnel with alerting or reporting responsibilities must be provided with a current list of telephone numbers and addresses of those people they may have to contact.

3. Procedures

Many factors determine what procedures are needed in an emergency, such as:

- the degree of emergency
- the size of organisation
- the capabilities of the organisation in an emergency situation
- the immediacy of outside aid
- the physical layout of the premises
- the number of structures.

Common elements to be considered in all emergencies include:

- pre-emergency preparation
- provisions for alerting and evacuating staff
- handling casualties
- containing the emergency.

Natural hazards, such as floods or severe storms, often provide prior warning. The plan should take advantage of such warnings with, for example, instructions on sand bagging, removal of equipment to needed locations, providing alternate sources of power, light or water, extra equipment and relocation of personnel with special skills.

Phased states of alert allow such measures to be initiated in an orderly manner.

Common elements of a plan

Goal and objective	A statement similar to that in the Disaster Mitigation Plan (refer to Module 3 Unit 2).
Authority	Acknowledgement of who requested and/or authorised the plan. The text of the approval authority may be annexed to the body of the plan.
Scope	There is clearly defined information of the geographical, organisational and departmental limits of the application of the plan.
Emergency operation	Emergency Plan has information on the Emergency Operation Centre, its location, and the Emergency Response Team and responsibilities.
Situation	What special hazards are important in an emergency? There should be a summary of existing and potential hazards based on historical evidence or lessons learned.
Organisation and responsibilities	Clear identification of who does what. For a large organisation, there is up-to-date information on the sub-plans, its scope, and with assigned responsibility of each stakeholder.

Table 1: Common elements of a plan

Annexure and appendices to the plan

Appendix I

A separate appendix for the contact information of each member along with his or her designation and specific responsibilities.

Appendix II

An updated inventory of tools and equipment available for rescue/relief along with options for acquiring tools from sources if not available within the company or the municipality.

Appendix III

Details of first aid equipment and the medicines available as well as identified hospital facilities within the vicinity of the company or the local community.

The information must be dynamic, and the appendices updated to accommodate any change.

Evacuation planning

The principle behind evacuation planning is to move citizens or the inhabitants of the company/industry from the place of risk to the place of safety through a safe route.

Evacuations are more common than many people realise. Hundreds of times each year, transportation and industrial accidents release harmful substances, forcing thousands of people to leave their homes. Fires and floods cause evacuations even more frequently. Almost every year, people along the Gulf and Atlantic coasts of the United States are evacuated in the face of approaching hurricanes.

When community evacuations become necessary, local officials provide information to the public through the media. In some circumstances other warning methods, such as sirens or telephone calls are also used. Government agencies or volunteer organisations like the Red Cross or the Salvation Army provide emergency shelter and supplies.

> "It may not be possible to take hazards away from the people but people can be taken away from the hazards."
>
> Author Unknown

Procedure

To be prepared for an emergency, enough water, food, clothing and emergency supplies are necessary for at least three days' duration. In a catastrophic emergency, you need to be self-sufficient for even longer periods.

The amount of time available to evacuate will depend on the duration of the disaster and damage caused. If the event can be monitored, such as a hurricane, you might have a day or two to get ready. However, many disasters allow no time for people to gather even the most basic necessities. This is why it is important to prepare now.

The efficiency of the evacuation operation depends upon the means of transportation available and the vicinity of safer shelter. For timely evacuation after a warning is issued, it is important that enough transport can be arranged for the potential population.

Process

Normally, it is very difficult for people to decide to evacuate. Depending upon the time available there are various processes by which people are evacuated:

- Evacuation by **default**:
    - by redirecting the traffic while proceeding on a certain route.
- Evacuation by **invitation**:
    - to a safer shelter by a volunteer.
- Evacuation by **compromise**:
    - a compromise agreement by a group wanting something else.
- Evacuation by **decision:**
    - when warning is confirmed and a conscious plan for evacuation is made and implemented.

The success of evacuation planning will depend upon the understanding of the warnings by the communities that participate, the size of the population and the land use or safety of the transportation routes.

The evacuation order is of great importance in alerting staff. To avoid confusion, only one type of signal should be used for the evacuation order. Commonly used for this purpose are sirens, fire bells, whistles, flashing lights, paging system announcements or word-of-mouth in noisy environments.

The all-clear signal is less important since time is not such an urgent concern.

When initiating an evacuation, the following are “must do’s”:

- identify evacuation routes
- identify alternate means of escape
- make these known to all staff
- keep the routes unobstructed
- designate specific safe locations for staff to gather for head counts to ensure that everyone has left the danger zone.
- assign individuals to assist handicapped employees in emergencies
- carry out treatment of the injured
- search for the missing simultaneously with efforts to contain the emergency
- provide alternate sources of medical aid when normal facilities may be in the danger zone
- contain the extent of the property loss only when the safety of all staff and neighbours at risk has been clearly established.

Lateral evacuation

Lateral evacuation is the immediate and rapid movement of people out of or away from a threat or actual occurrence of a hazard. This is the safest

and most efficient form of evacuation and is generally implemented in response to events such as a hurricane or imminent flooding.

Vertical evacuation

Recently a new concept of vertical evacuation was developed, especially for disasters like cyclones and floods, where very little time is available to transport and the population to be moved is large compared to the means available. This concept involves evacuation of people to the upper floors in multi-storey buildings that are fully engineered to be disaster-safe. It has been a very common practice in third world countries to shift to the roof during floods and come back after the flood level goes down.

Shelter-in-place

Shelter-in-place is the practice of going or remaining safely indoors during an outdoor release of a hazardous substance. It has been demonstrated to be the most effective response during the first few hours of a substance release where the public would be at higher risk outdoors. Such action would generally be taken after a chemical accident or terrorist attack. Depending on the exact situation, everyone within a specific distance of the incident may be ordered to shelter in place or people within a closer range may be ordered to evacuate while everyone else shelters in place. Sheltering in place is generally only used for a short period of time.

Activity 4.1

Activity

Complete **one** of the following options:

1. Prepare an evacuation plan for your organisation on the onset of a fire alarm.
2. You have received a warning of inundation of a river in your city with water levels rising 3 metres above HFL during onset of the monsoon. Prepare an evacuation plan for a squatter settlement living in the flood plains of the river.

Unit summary

Summary

In this unit you were provided with a practical overview of emergency planning with emphasis on the all-hazards/common consequence approach. In addition you learned the basic components and the development of contingency plans.

Unit 9

Business continuity planning

Introduction

Business continuity planning is (for all intent and purpose) the cornerstone of emergency preparedness; for without the capability to continue core functions post disaster an organisation's capacity to survive will be considerably diminished.

Upon completion of this unit you will be able to:

Outcomes

- *identify* and *develop* business continuity planning
- *identify* business impact analysis
- *prepare* for and *respond* to a business interruption.

Terminology

Terminology

Alternate site	A location, other than the normal facility, used to process data and/or conduct critical business functions in the event of a disaster.
Best practice	Proven activities or processes that have been successfully used by multiple organisations. ITIL is an example of a collection of Best Practices that have been collected from IT organisations around the world.
Business continuity	An on-going process designed to ensure that the necessary steps are taken to identify the impact of potential losses, maintain viable recovery strategies and recovery plans and ensure continuity of services in the event of a major failure, emergency or disaster (Public Safety Canada, 2005).
Business continuity management	The business process responsible for managing risks that could seriously impact the business. BCM safeguards the interests of key stakeholders, reputation, brand and value-creating activities. The BCM process involves reducing risks to an acceptable level and planning for the recovery of business processes should a disruption to the business occur. BCM sets the objectives, scope

	and requirements for IT service continuity management.
Business continuity plan (BCP)	A comprehensive written plan to maintain or resume business in the event of a disruption. BCP includes both the technology recovery capability (often referred to as disaster recovery) and the business unit(s) recovery capability.
Business continuity planning	An all-encompassing term covering both disaster recovery planning and business resumption plan.
Business impact analysis	The process of analysing all business functions and the effect that a specific disaster may have upon them.
Business recovery process	The common critical path that all companies follow during a recovery effort. There are major nodes along the path which are followed regardless of the organisation. The process includes: immediate response, environmental restoration or relocation, functional restoration, data recovery and synchronisation, restore business functions and return to normal.
Resilience	The ability of an organisation to absorb the impact of a business interruption and continue to provide a minimum acceptable level of service.
Risk	A possible event that could cause harm or loss, or affect the ability to achieve objectives. A risk is measured by the probability of a threat, the vulnerability of the asset to that threat and the impact it would have if it occurred.
Risk assessment	The initial steps of risk management. Analysing the value of assets to the business, identifying threats to those assets, and evaluating how vulnerable each asset is to those threats. Risk assessment can be quantitative (based on numerical data) or qualitative.
Risk management	The discipline which ensures that an organisation does not assume an unacceptable level of risk.
Threat	Anything that might exploit vulnerability. Any potential cause of an incident can be considered to be a threat. For example, a fire is a threat that could exploit the vulnerability of flammable floor coverings. This term is commonly used in information security management and IT service continuity management, but also applies to other areas such as problem and availability

management.

Vulnerability — A weakness that could be exploited by a threat. For example an open firewall port, a password that is never changed, or a flammable carpet. A missing control is also considered to be a vulnerability.

What is business continuity?

Business continuity is an on-going process (Figure 3) designed to ensure that the necessary steps are taken to identify the impact of potential losses, maintain viable recovery strategies and recovery plans and ensure continuity of services in the event of a major failure, emergency or disaster.

Business continuity plans ensure availability of essential services, programmes and operations and the timely resumption of services.

Ideally, public and private sector policy will require the development of business continuity plans and procedures to ensure availability of essential services. All sectors must establish the capability to resume essential services by putting appropriate risk mitigation processes in place to prevent and mitigate the effect of business interruption and support the recovery of business activities.

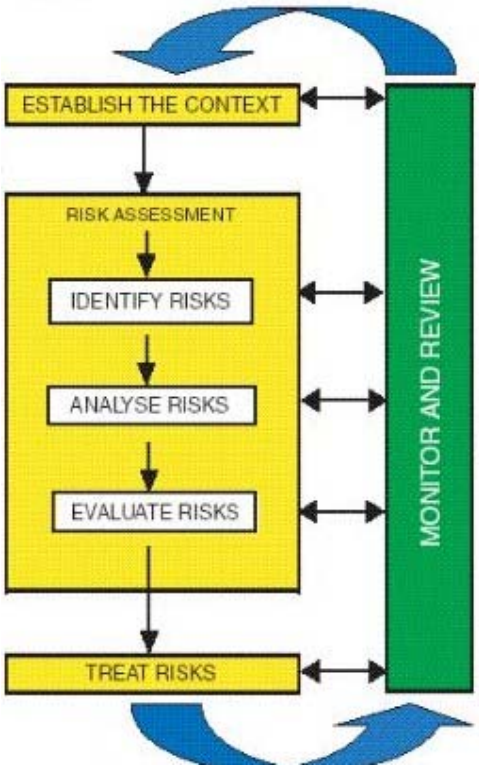

Figure 3: Business Continuity Planning Cycle.

Source: Figure adapted by Wayne Dauphinee from various public domain sources

Critical services or products are those that must be delivered to ensure survival, avoid causing injury and meet legal or other obligations of an organisation.

Business continuity planning is a proactive planning process that ensures critical services or products are delivered during a disruption.

A business continuity plan includes:

- Plans, measures and arrangements to ensure the continuous delivery of critical services and products, which permits the organisation to recover its facility, data and assets.
- Identification of necessary resources to support business continuity, including personnel, information, equipment, financial allocations, legal counsel, infrastructure protection and accommodation.

Having a BCP enhances an organisation's image with employees, shareholders and customers by demonstrating a proactive attitude. Additional benefits include improvement in overall organisational efficiency and identifying the relationship of assets and human and financial resources to critical services and deliverables.

Why is business continuity planning important?

Every organisation is at risk from potential disasters that include:

- natural disasters such as tornadoes, floods, blizzards, earthquakes and fire
- accidents
- sabotage
- power and energy disruptions
- communications, transportation, safety and service sector failure
- environmental disasters such as pollution and hazardous materials spills
- cyber-attacks and hacker activity.

Creating and maintaining a BCP helps ensure that an institution has the resources and information needed to deal with these emergencies.

Creating a business continuity plan

A BCP typically includes five sections:

1. BCP governance
2. business impact analysis (BIA)
3. plans, measures and arrangements for business continuity
4. readiness procedures
5. quality assurance techniques (exercises, maintenance and auditing).

Establish control

A BCP contains a governance structure often in the form of a committee that will ensure senior management commitments and define senior management roles and responsibilities.

The BCP senior management committee is responsible for:

- oversight
- initiation
- planning
- approval
- testing
- audit of the BCP.

It also:

- implements the BCP
- co-ordinates activities
- approves the BIA survey
- oversees the creation of continuity plans
- reviews the results of quality assurance activities.

Senior managers or a BCP committee would normally:

- approve the governance structure
- clarify their roles, and those of participants in the programme
- oversee the creation of a list of appropriate committees, working groups and teams to develop and execute the plan
- provide strategic direction and communicate essential messages
- approve the results of the BIA
- review the critical services and products that have been identified
- approve the continuity plans and arrangement
- monitor quality assurance activities
- resolve conflicting interests and priorities.

This BCP committee normally comprises the following members:

- **Executive sponsor**
  They have overall responsibility for the BCP committee and elicit senior management's support and direction, and ensure that adequate funding is available for the BCP programme.
- **BCP co-ordinator**
  They secure senior management’s support; estimate funding requirements, develop BCP policy, co-ordinate and oversee the BIA process, ensure effective participant input, co-ordinate and oversee the development of plans and arrangements for business continuity, establish working groups and teams and define their responsibilities, co-ordinate appropriate training and provide regular review, testing and audit of the BCP.

- **Security officer**
  They work with the co-ordinator to ensure that all aspects of the BCP meet the security requirements of the organisation.
- **Chief information officer (CIO)**
  They co-operate closely with the BCP coordinator and IT specialists to plan for effective and harmonised continuity.
- **Business unit representatives**
  They provide input, and assist in performing and analysing the results of the business impact analysis.

  The BCP committee is commonly co-chaired by the executive sponsor and the co-ordinator.
- **Business impact analysis (BIA)**
  The purpose of the BIA is to identify the organisation's mandate and critical services or products, rank the order of priority of services or products for continuous delivery or rapid recovery and identify internal and external impacts of disruptions. We discuss these steps in more detail below.

Identify the mandate and critical aspects of an organisation

This step determines what goods or services must be delivered. Information can be obtained from the mission statement of the organisation and legal requirements for delivering specific services and products.

Prioritise critical services or products

Once the critical services or products are identified they must be prioritised based on minimum acceptable delivery levels and the maximum period of time the service can be down before severe damage to the organisation results. To determine the ranking of critical services, information is required to determine the impact of a disruption to service delivery, loss of revenue, additional expenses and intangible losses.

Identify impacts of disruptions

The impact of a disruption to a critical service or business product determines how long the organisation could function without the service or product and how long clients would accept its unavailability. It will be necessary to determine the time a service or product could be unavailable before severe impact is felt.

Identify areas of potential revenue loss

To determine the loss of revenue, it is necessary to determine which processes and functions that support service or product delivery are involved with the creation of revenue. If these processes and functions are not performed, is revenue lost? How much? If services or goods cannot be provided, would the organisation lose revenue? If so, how much revenue, and for what length of time? If clients cannot access certain services or products would they then to go to another provider, resulting in further loss of revenue?

Identify additional expenses

If a business function or process is inoperable, how long would it take before additional expenses would start to add up? How long could the function be unavailable before extra personnel would have to be hired? Would fines or penalties from breaches of legal responsibilities, agreements, or governmental regulations be an issue, and if so, what are the penalties?

Identify intangible losses

Estimates are required to determine the approximate cost of the loss of consumer and investor confidence, damage to reputation, loss of competitiveness, reduced market share, and violation of laws and regulations. Loss of image or reputation is especially important for public institutions as they are often perceived as having higher standards.

Insurance requirements

Since few organisations can afford to pay the full costs of a recovery, having insurance ensures that recovery is fully or partially financed. When considering insurance options, decide what threats to cover. It is important to use the BIA to help decide both what needs insurance coverage and the corresponding level of coverage. Some aspects of an operation may be over-insured, or under-insured. Minimise the possibility of overlooking a scenario and ensure coverage for all eventualities.

Document the level of coverage of your institutional policy and examine the policy for uninsured areas and non-specified levels of coverage. Property insurance may not cover all perils (steam explosion, water damage and damage from excessive ice and snow not removed by the owner). Coverage for such eventualities is available as an extension in the policy.

When submitting a claim, or talking to an adjuster, clear communication and understanding is important. Ensure that the adjuster understands the expected full recovery time when documenting losses. The burden of proof when making claims lies with the policyholder and requires valid and accurate documentation. Include an expert or an insurance team when developing the response plan.

Ranking

Once all relevant information has been collected and assembled, rankings for the critical business services or products can be produced. Ranking is based on the potential loss of revenue, time of recovery and severity of impact a disruption would cause. Minimum service levels and maximum allowable downtimes are then determined.

Identify dependencies

It is important to identify the internal and external dependencies of critical services or products, since service delivery relies on those dependencies.

Internal dependencies include:

- employee availability
- corporate assets such as equipment, facilities, computer applications, data, tools, vehicles
- support services such as finance, human resources, security and information technology support.

External dependencies include:

- suppliers
- any external corporate assets such as equipment, facilities, computer applications, data, tools, vehicles, and
- any external support services such as facility management, utilities, communications, transportation, finance institutions, insurance providers, government services, legal services, and health and safety service.

Business continuity plans

This step consists of the preparation of detailed response/recovery plans and arrangements to ensure continuity. These plans and arrangements detail the ways and means to ensure critical services and products are delivered at minimum service levels within tolerable down times. Continuity plans should be made for each critical service or product.

Business continuity plan developing, testing and maintenance

Development

At this step the actual plan must be developed, incorporating the strategies that you have chosen. As a minimum, the plan should include:

- purpose
- scope
- authority
- activation of business continuity plan
- recovery emergency operations centre (REOC)
- business relocation
- security
- accounting and finance
- mainframe backup plan
- computer backup plan
- protection and retrieval of vital records
- vendors
- marketing
- utility support

- communications
- human resources
- public relations.

Testing

In the same way that your emergency response plan must be tested, so must your business continuity plan (BCP).

The principles for exercising your response plan are the same for testing your BCP. First, you must ensure that all your staff with BCP responsibilities is trained. Once people are trained, it is necessary to set up a testing schedule. Testing the BCP involves all of the components of your BCP.

Choose a time and date for a disaster recovery simulation. Given your current state of operations and taking into account the expected damage, what personnel, data, information, materials and supplies would you need? Try to access these resources. How many vendors would be able to meet your needs? How many trained staff are on hand? How long would it take to get your computer system up and running?

Maintenance

Obviously, the BCP is never complete. Businesses are always adding new computers and new applications. New products are developed and staff comes and goes, as do vendors and clients.

Testing your BCP will point out some of the problems; however, it is important to keep the BCP "alive" and not wait for a test!

Mitigating threats and risks

Threats and risks are identified in the BIA or in a full-threat-and-risk assessment.

Moderating risk is an on-going process and should be performed even when the BCP is not activated. For example, if an organisation requires electricity for production, the risk of a short-term power outage can be mitigated by installing stand-by generators.

Another example would be an organisation that relies on internal and external telecommunications to function effectively. Communications failures can be minimised by using alternate communications networks or installing redundant systems.

Analyse current recovery capabilities

Consider recovery arrangements the organisation already has in place and their continued applicability. Include them in the BCP if they are relevant.

Create continuity plans

Plans for the continuity of services and products are based on the results of the BIA. Ensure that plans are made for increasing levels of severity of

impact from a disruption. For example, if limited flooding occurs beside an organisation's building, sand-bagging may be used in response. If water rises to the first floor, work could be moved to another company building or higher in the same building. If the flooding is severe, the relocation of critical parts of the business to another area until flooding subsides may be the best option.

Another example would be a company that uses paper forms to keep track of inventory until computers or servers are repaired, or electrical service is restored. For other institutions, such as large financial firms, any computer disruptions may be unacceptable, and an alternate site and data replication technology must be used.

The risks and benefits of each possible option for the plan should be considered, keeping cost, flexibility and probable disruption scenarios in mind. For each critical service or product, choose the most realistic and effective options when creating the overall plan.

Response preparation

Proper response to a crisis for the organisation requires teams to lead and support recovery and response operations. Team members should be selected from trained and experienced personnel who are knowledgeable about their responsibilities.

The number and scope of teams will vary depending on organisation's size, function and structure and can include:

- Command and control teams that include a crisis management team, and a response, continuation or recovery management team.
- Task-oriented teams that include:
    - alternate site co-ordination team
    - contracting and procurement team
    - damage assessment and salvage team
    - finance and accounting team
    - hazardous materials team
    - insurance team, legal issues team
    - telecommunications/alternate communications team
    - mechanical equipment team
    - mainframe/midrange team, notification team
    - personal computer/local area network team
    - public and media relations team
    - transport co-ordination team
    - vital records management team.

The duties and responsibilities for each team must be defined and include identifying the team members and authority structure, identifying the

specific team tasks, members' roles and responsibilities, creation of contact lists and identifying possible alternate members.

For the teams to function in spite of personnel loss or availability it may be necessary to multi-task teams and provide cross-team training.

Alternate facilities

If an organisation's main facility or information technology assets, networks and applications are lost an alternate facility should be available.

There are **three** types of alternate facility:

1. **Cold site** is an alternate facility that is not furnished and equipped for operation. Proper equipment and furnishings must be installed before operations can begin, and substantial time and effort is required to make a cold site fully operational. Cold sites are the least-expensive option.
2. **Warm site** is an alternate facility that is electronically prepared and almost completely equipped and furnished for operation. It can be fully operational within several hours. Warm sites are more expensive than cold sites.
3. **Hot site** is fully equipped, furnished and often even fully staffed. Hot sites can be activated within minutes or seconds. Hot sites are the most expensive option.

When considering the type of alternate facility, consider all factors, including threats and risks, maximum allowable downtime and cost.

For security reasons, some organisations employ hardened alternate sites. Hardened sites contain security features that minimise disruptions. Hardened sites may have:

- alternate power supplies
- back-up generation capability
- high levels of physical security
- protection from electronic surveillance or intrusion.

Readiness procedures

Once planning has been completed and plans are in place an on-going training and exercise programme should be initiated.

Training

Business continuity plans can be smoothly and effectively implemented by:

- having all employees and staff briefed on the contents of the BCP and aware of their individual responsibilities
- having employees with direct responsibilities trained for tasks they will be required to perform, and be aware of other teams' functions.

Exercises

After training, exercises should be developed and scheduled in order to achieve and maintain high levels of competence and readiness.

While exercises are time- and resource-consuming, they are the best method for validating a plan. The following items should be incorporated when planning an exercise:

- The exercise should be monitored impartially to determine whether objectives were achieved. Participants' performance, including attitude, decisiveness, command, co-ordination, communication and control should be assessed.
- Debriefing should be short, yet comprehensive, explaining what did and did not work, emphasising successes and opportunities for improvement.
- Participant feedback should also be incorporated in the exercise evaluation.
- Exercise complexity level can also be enhanced by focusing the exercise on one part of the BCP instead of involving the entire organisation.

What to do when a disruption occurs

Disruptions are handled in **three** steps:

1. Response
2. Continuation of critical services
3. Recovery and restoration.

Response

Incident response involves the deployment of teams, plans, measures and arrangements. The following tasks are accomplished during the response phase: incident management, communications management, and operations management.

- **Incident management**
  Incident management includes the following measures:
  - Notifying management, employees, and other stakeholders assuming control of the situation; identifying the range and scope of damage; implementing plans identifying infrastructure outages.
  - Co-ordinating support from internal and external sources.
- **Communications management**
  In the management of communications:
  - It is essential to control rumours, maintain contact with the media, emergency services and vendors, and assure employees, the public and other affected stakeholders.

- Requirements may necessitate building redundancies into communications systems and creating a communications plan to adequately address all requirements.

- **Operations management**
  An emergency operations centre (EOC) can be used to manage operations in the event of a disruption. Having a centralised EOC where information and resources can be co-ordinated, managed and documented helps ensure effective and efficient response.

Continuation

Ensure that all time-sensitive critical services or products are continuously delivered or not disrupted for longer than is permissible.

Recovery and restoration

The goal of recovery and restoration operations is to recover the facility or operation and maintain critical service or product delivery. Recovery and restoration includes:

- re-deploying personnel
- deciding whether to repair the facility, relocate to an alternate site or build a new facility
- acquiring the additional resources necessary for restoring business operations
- re-establishing normal operations
- resuming operations at pre-disruption levels.

Activity 4.2

Activity

Assess your company's business continuity readiness by answering these questions.

Count your "Nos" and the "Don't Knows" and then check your answers at the end of this module.

Can you identify your critical business activities that satisfy your customers' expectation and support your overall business operation? Yes ☐ No ☐ Don't Know ☐	Have you and your IT colleagues successfully placed business continuity on the board agenda? Yes ☐ No ☐ Don't Know ☐
Can you identify the critical business information needed for these activities to succeed? Yes ☐ No ☐ Don't Know ☐	Have you worked with your IT colleagues to develop an approved business continuity plan that accounts for all aspects of business continuity and recovery? Yes ☐ No ☐ Don't Know ☐

Do you have the information on the frequency, impact and causes of downtime? Yes ☐ No ☐ Don't Know ☐	Is your business continuity plan regularly tested? Yes ☐ No ☐ Don't Know ☐
Does this information allow you to identify and rank your most vulnerable business activities? Yes ☐ No ☐ Don't Know ☐	Do you have a change control process in place to keep your continuity plan current with process, organisational and technology changes? Yes ☐ No ☐ Don't Know ☐
Are your legacy systems and IT resources adequately protected against hacker viruses? Yes ☐ No ☐ Don't Know ☐	Are you confident that if a disruption or disaster struck this minute, your organisation could recover quickly and smoothly enough to prevent damage to your business? Yes ☐ No ☐ Don't Know ☐
Have you developed a checklist, by functional area, of what your company will need to continue business effectively in the case of a disruption or emergency? Yes ☐ No ☐ Don't Know ☐	

Activity 4.3

Activity

Circle your response then check your answers at the end of this module.

1. Insurable losses can be:
    a. direct and indirect losses
    b. only direct losses
    c. only indirect losses.
2. In the case of earthquakes, most of the damage is:
    a. structural in nature
    b. non-structural in nature
    c. equally structural and non-structural.
3. Business impact analysis:
    a. includes testing the plan
    b. includes hazard identification
    c. incorporates various cost options.
4. Criteria for developing senior management awareness include:
    a. keep the presentation under 15 minutes
    b. aim for approval
    c. information, not examples.

5. When considering alternate sites, which is the least important?
    a. location
    b. employee comfort
    c. computer space.
6. After a disaster, many businesses are inconvenienced by:
    a. lack of utilities
    b. unavailability of insurance agents
    c. employee illness.
7. Vital records usually include:
    a. census data
    b. payroll records
    c. personnel files.
8. Computer data should be backed up regularly and stored:
    a. on web servers
    b. on floppy discs
    c. off site.

Activity 4.4

Activity

Assume that your company has had a fire. The fire has been major but the building is not destroyed. Consider the following:

1. What services and costs would you want to have covered by insurance?
2. What tasks would need to be completed before you could return to your building?

Unit summary

Summary

In this unit you learned the nature of business continuity, how to conduct a business impact analysis and develop a business continuity plan and how to prepare for (and respond to) a business interruption.

Good planning for business continuity starts by examining potential threats, then moves on to reviewing vulnerable areas and developing the necessary plans to prepare for disasters, to respond to the events and to quickly recover from the impacts. The aim is to prevent loss of life, inventory, equipment, records and buildings, and to continue operating with the least disruption possible.

Unit 10

Community engagement

Introduction

In this unit we discuss community preparedness as a critical component of good emergency preparedness planning and practice.

Upon completion of this unit you will be able to:

Outcomes

- *identify* why it is critical to work with communities in developing preparedness and disaster reduction plans
- *describe* good practices to promote public and household preparedness.

Terminology

Terminology

Community	A social group of any size whose members live in a specific locality, share government, and often have a common cultural and historical heritage.
Mitigation	Measures taken in advance of a disaster aimed at decreasing or eliminating its impact on society and on environment. (U.N. 1992, 4)
Preparedness	Activities and measures taken in advance to ensure effective response to the impact of disasters, including issuing timely and effective early warnings and the temporary removal of people and property from a threatened location. (U.N. ISDR 2002, 25)
Prevention	Activities to provide outright avoidance of the adverse impact of hazards and related environmental, technological and biological disasters. (U.N. ISDR 2002, 25)
Resilience	The adaptive capacity to overcome the problems that may result from change, building upon the inherent capacities rather than only relying on external interventions to overcome vulnerabilities.

Sustainable communities	Where people and property are kept out of the way of natural hazards, where the inherently mitigating qualities of natural environmental systems are maintained and where development is designed to be resilient in the face of natural forces. .

How emergency management plays a role

A key purpose of emergency management is to assist communities to prepare for unexpected and sometimes overwhelming events that threaten people's physical, economic, social and/or emotional well-being.

Good emergency management recognises that this is most effectively achieved by working closely with communities to identify risks and hazards and to mobilise and strengthen existing resources and capacities.

Based on this, emergency management is only as strong as the communities it supports.

Focusing on mitigation and prevention

A fundamental step in preparing communities for disasters is to reduce the potential impacts of threats from hazards. Mitigation activities can be either structural or non-structural in nature.

Health promotion is an example of non-structural mitigation. In emergencies, hospitals are inundated, leaving those but the most seriously ill at risk of not being able to access medical care. A focus on disease prevention and control among other actions may reduce demand on hospitals and render the population healthier and more resilient to the effects of emergencies and disasters.

Maintaining community infrastructure

Many communities face pressures from aging infrastructure, increasing the risk of destruction and service disruption during a disaster.

Because modern infrastructures serve a complex range of functions such as:

- transportation
- communication
- energy
- utilities
- water and waste systems.

This interconnectedness exacerbates a community's vulnerability to disasters. Building and maintaining infrastructure to withstand the impacts of an increasing number of extreme events is an investment that can improve a community's resilience during and after a disaster.

Health-related infrastructure such as:

- hospitals
- emergency medical services
- walk-in clinics and pharmacies
- related psychosocial services such as telephone help-lines and grief counselling

are not only important in maintaining the health of people in everyday life, but also serve as the foundation to respond to any emergency or disaster.

Building community capacity

Although disasters may often have devastating consequences, they have also taught us that people can (and do) recover from such catastrophes and that they must be regarded not as victims but as partners in both preparing for (and recovering from) extreme events.

Volunteers of all ages (and from all walks of life) play an important part in enabling communities to prepare for and recover from emergencies. For example, volunteers can fill sand bags during floods, work telephone information lines, or deliver food and supplies to people unable to leave their homes.

Enhancing resilience is now recognised as a key concept in building the capacity of communities to prepare for emergencies and disasters

Community-based planning

No amount of disaster planning can be successful unless communities likely to be affected participate in the process.

Any disaster mitigation plan is bound to fail without the involvement of the community at every stage of its preparation as well as implementation.

Community may comprise:

1. a family
2. a neighbourhood/settlement
3. a school
4. an office
5. a city
6. a village.

Why is community participation essential in disaster planning?

Community participation is essential in disaster planning for many reasons:

- When disaster strikes, the communities are the first to respond and react. In the first few moments before the designated

management team gets into operation, maximum loss can occur when communities panic or do not know how to react.

- Communities are more familiar with the available resources/facilities, social groups, and the surroundings.
- Communities with experience of past disasters have historical evidence and information of the effects and the response needed. They have enough lessons learnt in the past to be able to support mitigation planning.
- Communities are familiar with the vulnerabilities of the areas and the people in their vicinity. They may also know as to what could work best and the capabilities within the community to take up various actions required for mitigation.
- Communities also have the information of the demographics and topographies to be able to provide sufficient information for developing hazard maps, risk assessment and mitigation plans. They would also be able prioritise their issues based on their sufferings. Communities can generate political will and can form community pressure groups to be able to bring in change.
- Communities have a two-way link to the governments/authorities as well as NGOs ready to help.

Community involvement

At the inception stage

Community has a role from the inception stage itself, even before prevention is perceived.

Community is the sole evidence of previous disasters and a basic source of information on the disasters and lessons from the past.

Based on this kind of historical data, hazard mapping and identification can be prepared. For example, in case of earthquakes, most of the predictions are based on evidence of past earthquakes, the year of their occurrence and their severity. A community's information and experience are the only means to predict and understand future risks.

At the warning and alert stages

Forecasting and predictions (on time) is the most important aspect of prevention.

Unless it is disseminated and understood by the communities, it can only cause chaos and panic. Therefore, communities developing their own line of communication with the involvement of their own leaders can help effective and timely dissemination in the language best understood by the communities and based on the available means of dissemination of the warnings. Also, the community's own experience of past disasters allows them to be warned to take timely action.

For example, in the coastal areas of tropical nations, fishing communities go to sea for fishing and do not return for days. Unless their family members are warned in the language understood by them, they would not

evacuate. Also, the fishermen would need wireless systems or ham radios to be warned while they are at sea. They would neither have the means to access the media nor would they understand any statistical information in terms of the depth of the storm surge or the speed of the cyclone.

At the risk-assessment stage

Information is the basis of any preparedness planning.

Information about vulnerabilities must involve communities to be authentic. For example:

- how many households and people live in the settlements?
- how many older people are there?
- how many women and children below a certain age are there in the community?
- what hospitals are available in the vicinity?
- which houses are unsafe and not built with code provisions?

This information forms the basis of any vulnerability assessment.

At the stage of preparing the disaster mitigation plans

Major steps in disaster mitigation planning include:

- Identifying and prioritising issues to be addressed.
- Identifying the community leaders who could be trained to form a part of the task force and first respondents to the disaster.
- Identifying expert manpower resources like community doctors, educators, technical personnel to meet the immediate demands of human injury and asset loss prevention during and after the disaster can go a long way in saving huge losses.

Furthermore, the community is the best trainer and co-ordinator to disseminate, organise awareness and campaigns among their own peer groups, which become pressure groups for the political and local authorities for timely action.

At the physical planning stage (layouts at household and neighbourhood level)

Preparation of zoning plans and land use plans to avoid disasters can only be possible with full knowledge of the socio-cultural and socio-economic status of the communities and their requirements.

Information on their lifestyles, needs of the infrastructure, cohesive social groups, religious needs, economic structures and occupations are all key areas to be examined for acceptance of any land use or development for safety or resettlement planning that would prevent disasters. This would lead to sharing of costs and better planning for the future.

Community awareness

The foremost step in involving the community is to instil confidence in efforts for preparedness and make the community aware of potential hazards and risks to their lives. This could be done through:

- media campaigns
- slogans
- bulletins
- education and training
- public meetings.

Ask yourself:

In your community, how would you go about disaster planning in your neighbourhood?

Educate yourselves

There are steps you can take yourself in the preparation of a disaster response plan for you community. Such steps may include:

- checking out neighbourhood watch, disaster resistant neighbourhood, emergency response information
- forming a committee within your civic association or community to develop a disaster response plan
- finding out what questions your community has about preparedness.

When liaising with your community, it is helpful to ask the following questions:

- What disasters should your community prepare for?
- What elements might put your community members at greatest risk in a disaster?
- Who in your community is at greatest risk in a disaster?
- What special resources does your community have?
- Is your committee viable in the future**?**

Educate your community

Experience has shown that well-informed communities are generally better prepared to deal collectively with the impacts of a disaster. The following are suggested community engagement activities:

- Invite speakers from the Civic Federation, Red Cross, and/or the local government.
- Invite an emergency co-ordinator to address your civic association or community about disaster planning.
- Provide your community with information about the resources needed to address a disaster, including:

  - emergency kits
  - NOAA radios
  - family disaster plans
  - building emergency/evacuation plans for community members in high-rise buildings.

- At a neighbourhood meeting, discuss the best ways for your civic association to prepare for disaster.
- At every opportunity, encourage citizens to report suspicious activity.
- Re-educate your community periodically so that the community continues to understand the importance of preparedness.

Collect information about neighbourhood needs and resources

Develop a neighbourhood directory of emergency resources (special skills, training, equipment and so on) that shows people who they can contact in an emergency, including neighbours with:

- medical skills or retired (no longer practising) medical personnel
- weather warning radios
- Citizen Band (CB) radio and other wireless communication devices, such as Ham radios
- four-wheel drive vehicles.

Ensure that your community's member lists, email lists and directories are current (and remain so) by setting up periodic checks. (Even if people don't choose to join the civic association, they should be encouraged to join the lists for informational purposes). If you don't already do so, get to know your neighbouring civic associations and open up the lines of communication.

Enhance the lines of communication within your neighbourhood by increasing the use of email groups, telephone fan-out, and/or newsletters, if these methods are not maximised currently. Work with your community association to identify possible targets and weak points within (or adjacent to) your neighbourhood.

Develop lines of communication

If your civic association doesn't already do so, increase the lines of communication between the police or other regulatory authority and the neighbourhood by:

- introducing yourself to the police captain in charge of your area
- encouraging the circulation of crime reports within the neighbourhood
- encouraging periodic meetings between the police and the neighbourhoods to discuss crime trends and issues.

Develop a community disaster response plan

While developing a plan ask yourself the following questions:

- How can your neighbours be notified of an emergency if normal communication methods are unavailable?
- How can you communicate news, available resources and needs within your community and with outside responders during an emergency?
- How can members of the community support each other in preparing for and mitigating the negative effects of a disaster?
- What up-front plans and preparations need to be made by families and the community in order to better resist the effects of a disaster?

Periodically review the plan to ensure it still makes sense.

When reviewing your plan, ensure you have:

- Secured commitments to the plan.
- Secured the agreement of your community that they understand and will support the plan. Negotiate any differences until you have agreement.
- Ensured that all parties that you are counting on for support or resources in your plan know:
    - what is expected of them
    - when they will be expected to respond
    - who they turn to for direction
    - how you will be notified that they have responded.

Periodically test and update your plan

Once you have a plan, decide how you can best test the effectiveness and completeness of the plan. Test and update your plan until it is fully satisfactory and periodically re-test your plan.

Supporting community groups and networks

Perhaps the greatest resource of any community is its people.

People and communities struck by disasters should not be regarded as either helpless or as passive recipients of assistance. Rather, they should be seen as active partners in emergency preparedness and planning.

Engaging community groups in emergency management activities is critical to enhancing resilience. Working with community groups and networks can enhance outreach and raise awareness among the public, particularly hard to reach or socially invisible groups (for example, frail and isolated elderly, newcomers, the poor and homeless).

Community partners are also often the most knowledgeable about the distinct needs of their members. Although community organisations are increasingly recognised as partners in emergency management, a recent

study found that many emergency management and voluntary organisations do not have the networks and resources needed to maximise this collective potential.

Public and private sector organisations are also critical partners. Those with well-planned and tested business continuity plans will be better prepared to provide their services during a disaster and, by continuing to function, will enhance their community's capacity to recover. Businesses play a key role in assisting communities to recover after disasters, often contributing financial resources and much-needed supplies and materials to affected communities.

Individual preparedness

The commitment by individuals to plan and prepare for disasters is the cornerstone of stronger and more resilient communities. The ability of an individual or family to be self-sufficient for at least the first 72 hours after a disaster lessens personal suffering and hardship and reduces the demands on overstretched response systems.

Raising awareness and understanding of the risks that people face is an ongoing priority for emergency managers. Working closely with communities can help ensure that people's different beliefs, attitudes and perceptions are taken into account when preparing messages and public information. This, in turn, can increase the likelihood that provided information will be listened to and acted upon.

Activity 4.5

Activity

There is an earthquake whose epicentre is somewhere close to the village next to your town. You would like to volunteer your services for relief operations.

1. What are the likely constraints you may face?
2. How would you overcome them?
3. What kind of relief do you think would be best suited for the community?

Unit summary

Summary

You have now completed Module 4 in which you learned the importance of community engagement and involvement in emergency planning and preparedness. Module 5 will focus on operational response structures and mechanisms emphasising the importance of developing and implementing a systematic approach to respond to emergencies and disasters.

Activity answers

Activity 4.1

Answers will vary by location.

Activity 4.2

If you answered “No” or “Don’t know” to even one of these questions, your critical processes could be vulnerable to a business-crippling disruption.

Activity 4.3

1. a – direct and indirect losses
2. b – non-structural in nature
3. b – includes hazard identification
4. b – aim for approval
5. c – computer space
6. a – lack of utilities
7. b – payroll records
8. c – off site.

Activity 4.4

Answers will vary by location.

Activity 4.5

Answers will vary by location.

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Catastrophe Readiness and Response Course, FEMA Emergency Management Higher Education Program
http://training.fema.gov/EMIWeb/edu/crr.asp

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https://admin.qsl.net/index.php

Contingency Planning & Management
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www.ibm.com/services/continuity

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