CDRT FIELD GUIDE

A handbook for community response to disasters.

Capacity Building Initiative for Disaster Preparedness and Response

In Caribbean Red Cross Societies Project

IFRC

CaDRiM Reference Centre
Caribbean Disaster Risk Management

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Foreword

This CDRT guide was developed as part of the International Federation of Red Cross and Red Crescent Societies (IFRC) regional project “Improving the preparedness of Caribbean communities to respond to disasters affecting their locality”.

This manual is made possible by the support of the European Commission’s Humanitarian Aid Office (ECHO), the United States Agency for International Development (USAID), and the American and Finnish Red Cross Societies. The contents have been adapted from materials developed by the Red Cross Societies of the Caribbean, the United States Federal Emergency Management Agency (FEMA), the USAID Office of Foreign Disaster Assistance, and the West Indies Cricket World Cup Committee; contents are the responsibility of the Red Cross and do not necessarily reflect the views of ECHO or USAID.

Acknowledgements

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Special thanks also given to the Disaster Management Network for reviewing additional changes made to the guide in 2021.

Acronyms / Abbreviations

CDRT	Community Disaster Response Team
DANA	Damage Assessment and Needs Analysis
DIPECHO	ECHO's Disaster Preparedness program
ECHO	European Commission Office for Humanitarian Aid
IFRC	International Federation of Red Cross and Red Crescent Societies
ISDR	International Strategy for Disaster Reduction
OECD	Organization for Economic Cooperation and Development
OFDA	United States Office for Disaster Assistance
TESEC	European Centre of Technological Safety
VCA	Vulnerability and Capacity Assessment
WFP	World Food Program

Introduction

How to use the Lesson Plan

This document was created to assist Red Cross National Societies in using a standardized approach to train all human resources with certified methodologies. More specifically, it is part of the effort to guarantee that Community Disaster Response Teams (CDRTs) maintain the highest level of professionalism in their response to disasters. The Field Guide contains all the information needed to allow CDRTs to function effectively within communities.

All the information contained in the Field Guide and corresponding Presentations may not be relevant to your country's context, but Red Cross National Societies and any other community response group interested in adopting this approach can adjust the Presentations with country specific examples applicable to the standard content, as they see fit.

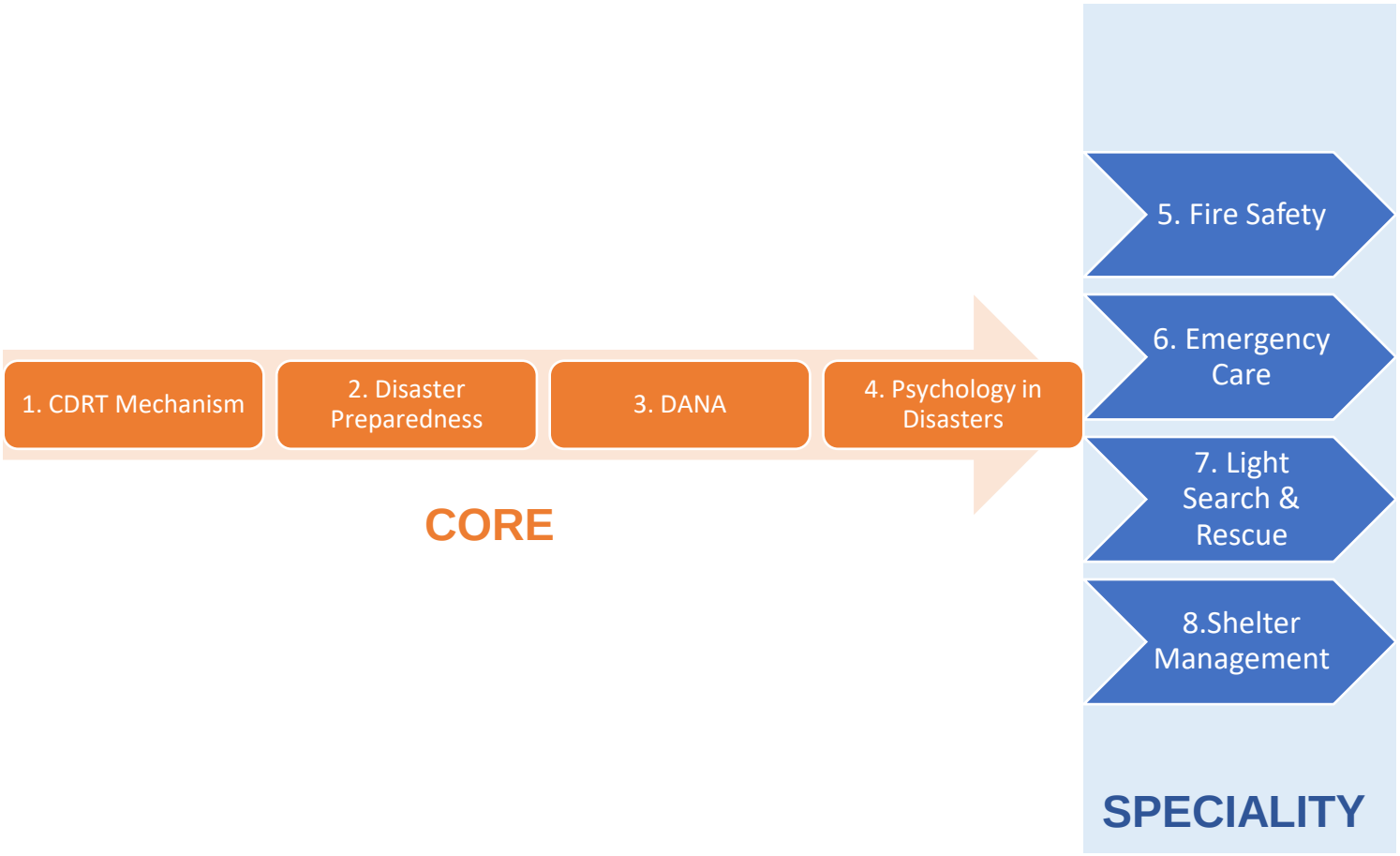
Introduction: Why establish a Community Disaster Response Team (CDRT)?

Emergency services personnel are always the best trained and equipped to handle emergencies, and in no situation should they be ignored. However, following any emergency, you and the community may be on your own for a period of time because of the size of the area affected, lost communications, and impassable roads.

Community Disaster Response Team (CDRT) training is designed to prepare you to help yourself, your family, and your neighbors in the event of an emergency. When responders may be overwhelmed and cannot attend to everyone impacted immediately. In this way, can make a difference by using the training in this Participant Manual to save lives and protect property.

This training covers basic skills that are important to know in an emergency when responder agencies are delayed in providing assistance. With training and practice and by working as a team, you will be able to do the greatest good for the greatest number of victims after a disaster, while protecting yourself from becoming a victim.

The following guide is organized around 10 Units, of which four modules compose the core content of the course (Units 1 to 4) and the last 4 constitute optional modules for specialization.



* DANA: Damage Assessment and Needs Analysis

Training in disaster response should not be a one-time event. Awareness, commitment, and skills must be reinforced through follow-up training and repeated practice to maintain the edge necessary for effective response in the face of a disaster. To maintain your skill level and continually improve performance, you and your team members should participate in continuing supplemental training when offered in your area. Working through practice disaster scenarios with other teams will provide opportunities not only for extended practice but for valuable networking with teams in the local area.

UNIT 01

CDRT & Disaster Risk Reduction

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OBJECTIVES

In this unit you will learn about:

Common Disaster Management Terms

Hazards, Disasters and Disaster Workers
What defines a disaster and a hazard and who are disaster workers.

Common Hazards
Earthquakes, thunderstorms, hurricanes, tsunamis, flooding and volcanoes.

Impacts on Households and Communities
The potential effect of extreme emergencies and disasters on transportation; electrical service; telephone communication; fuel; food; water, and shelter; and emergency services.

What is Climate Change and the Effects of Climate Change

Climate Change Adaptation

At the end of this unit, you should be able to:

- ✓ Understand disaster management terms.
- ✓ Learn about the different hazards.
- ✓ Understand how disasters can affect communities.
- ✓ Prepare against disasters and adapt for climate change.

1.1
Understanding Hazards & Disasters

1.1.1 Hazards, Disasters and Disaster Workers

Hazards may be natural or caused by human actions, these can occur unexpectedly and may cover a limited or a wide-ranging geographic area.

*The following are some examples of the **types of hazards** that may reach disaster proportions:*

- **Earthquakes**
- **Hurricanes and tropical cyclones**
- **Floods**
- **Tsunamis**
- **Volcanoes**
- **Fires**
- **Civil disturbances (e.g., riot)**
- **Hazardous materials incidents**

WHAT IS A HAZARD?

A hazard is a process, phenomenon or human activity that may cause loss of life, injury or other health impacts, property damage, social and economic disruption or environmental degradation.

Source: UNISDR

*** The following hazard wheel shows the various categories of a hazard:**

When Does A Hazard Become A Disaster?

A hazard becomes a disaster when the impacted community or society is no longer able to cope using its own resources.

What Is A Disaster?

A serious disruption of the functioning of a community or a society causing widespread human, material, economic or environmental losses which exceed the ability of the affected community or society to cope using its own resources.

Source: UNISDR

Whatever the cause, disasters have several key elements in common:

- The event is relatively unexpected, with little or no prior warning or opportunity to prepare.
- Available personnel and emergency services may not be available during the initial stages of a disaster because of demands for their services.
- There are widespread effects that could last a long period of time.
- Lives, health, and the environment are endangered.

1.1.2
What is Disaster Risk Reduction (DDR)?

Disaster risk reduction is the process of taking action to reduce the possible negative impacts, of disasters such as loss of life and damage to property. This is done by identifying, analyzing and managing the factors that causes communities to be prone to these negative impacts.

The aim of DRR is to:

1. Reduce exposure to hazards,

2. Decrease the vulnerability of people by making them more prepared to deal with disasters,

3. Protect lives, livelihoods and property through wise management of land and the environment.

1.1.3
What Is Vulnerability?

In order the reduce the negative impacts of disasters on communities we have first understand what are some of the factors that causes a community to vulnerable or susceptible to those impacts.

Vulnerability refers to the conditions that exist in a community that increases the risk to negative impacts.

Types of Vulnerabilities:

There are four (4) types of vulnerabilities:

1. **Social vulnerability** – This refers to the social interactions between community members and the traditional values, customs and beliefs of community. It also relates to the well-being of the community such as sufficient access to goods and services and the existence of peace and security. Disability and the levels of literacy and education can also affect vulnerability.

2. **Physical vulnerability** – Poor design and materials used to construct buildings and homes makes these structures more prone to damage from disasters.

3. **Environmental vulnerability** – Poor farming practices, poorly planned urban and industrial development which results in the depletion or removal of natural resources, such as the removal of forested areas can increase vulnerability.

4. **Economic vulnerability** – Poorer communities and countries with less financial resources can be more negatively impacted by disasters.

1.1.4
What is Risk?

Risk is defined as the probability of harmful consequences, or expected losses (deaths, injuries, property, livelihoods, economic activity disrupted or environment damaged) resulting from interactions between natural or human-induced hazards and vulnerable conditions. Source: UNDRR

The Science Of Risk:

Risk can be calculated using the following formula:

$$\textbf{Risk} = \frac{\text{Hazard} * \text{Exposure} * \text{Vulnerability}}{\text{Capacity to Cope}}$$

Hazard=
Probability of experiencing a certain intensity of a hazard

Exposure =
Number of people, property and infrastructure exposed to a hazard

Vulnerability =
Susceptibility to damage of the assets exposed to the hazard.

What Can Be Done About Risk?

There are four options or choices that can be made about risk:

1. Acceptable Risk

The level of potential losses that a society or community considers acceptable.

2. Risk Transfer

The process of formally or informally shifting the financial consequences of risks from one party to another. An example of this is insurance.

3. Risk Reduction

Implementing measures that would reduce the likelihood of a particular risk.

4. Risk Avoidance

The process of avoiding new disaster risks an example of which is relocating exposed persons and assets away from a vulnerable area.

Remember, natural hazards by themselves do not cause disasters, it is the combination of an exposed, vulnerable and ill-prepared population or community with a hazard event that results in a disaster. The main goal of Disaster Risk Reduction is to enhance community resilience.

1.1.5
What is Resilience?

It is the ability of individuals, communities, organisations to anticipate, prepare for, reduce the impact of, cope with and recover from the
long-term negative effects of disasters.

Actions taken by CDRTs in any phase of the disaster management cycle *(see below)* is done with aim of strengthening community resilience.

1.1.6
The Disaster Management Cycle

Mitigation:
Disasters often cannot be prevented fully, but their severity can be deceased by implementing various strategies and actions.

Mitigation measures include structural mitigation which include engineering techniques and hazard-resistant construction as well as non-structural mitigation which include improved environmental and social policies and public awareness.

Prevention:
Activities and measures to avoid existing and new disaster risks.

Preparedness:
This is the knowledge and capacities developed by communities and individuals to effectively anticipate, respond to and recover from the impacts of disasters.

Preparedness include identifying disaster risks, creating effective early warning systems, and increasing the capacity of individuals and communities to respond through the creation of community and family plans, the stockpiling of equipment and supplies, the development of arrangements for coordination, evacuation and public information, and associated training and field exercises.

Response:
Actions taken directly before, during or immediately after a disaster in order to save lives, reduce health impacts, ensure public safety and meet the basic subsistence needs of the people affected.

Recovery:
The restoring or improving of livelihoods and health, as well as economic, physical, social, cultural and environmental assets, systems and activities, of a disaster-affected community or society, aligning with the principles of sustainable development and “build back better”, to avoid or reduce future disaster risk.

Rehabilitation:
The restoration of basic services and facilities for the functioning of a community or a society affected by a disaster.

Source: UNDRR

1.2
Who Are “Disaster Workers?”

A variety of services, agencies, and programs work together to provide emergency services and disaster assistance to local residents after a disaster. However, these service providers cannot be everywhere at once, and initial needs may be greater than they can handle immediately with available resources.

During these initial hours after a disaster, when damage is heavy or widespread and emergency services are stretched thin, many people are called upon to provide assistance to those around them.

Individuals and families help themselves. Neighbors help neighbors. Coworkers help each other. Able-bodied people turn out to offer their services to the emergency services workers. Volunteers play an extremely important role in reducing the death, injury, and damage in the period immediately after a disaster.

They bring a wide variety of skills and experience to the task, and through teamwork can help build a vital network that links all parts of the disaster area.

1.3
Disasters

The potential threat of different types of disasters varies across the Caribbean.

This section provides overviews of the following types of disasters:

Earthquakes

Hurricanes & Tropical Cyclones

Floods

Tsunamis

Volcanoes

You may wish to highlight key parts that relate especially to your area, as shown through your community vulnerability and capacity assessment.

1.3.1

Earthquakes

In the Eastern Caribbean, earthquakes are measured in terms of magnitude and intensity.

Magnitude

Magnitude is used to describe the energy generated by an earthquake.

Three numbers are used to determine the magnitude of an earthquake:

1. The area that ruptures during the earthquake.
2. The amount of displacement during the earthquake.
3. The stiffness of the rocks that break.

By calculating these things seismologist can determine magnitude e.g. magnitude 5.8.

Earthquake in Chile
SOURCE: ShaRED

Intensity

Intensity scales attempt to describe the severity of an earthquake by describing the effects on people and damage to structures and geological formations. Each degree of intensity is described by a Roman numeral, (I, II, III etc.) and the effects of the earthquake roughly double in severity for each increase in intensity.

Earthquake in Haiti 2010
SOURCE: Wired, Cameron Davidson/Corbis

1.3.2
Thunderstorms

A thunderstorm is short-lived intense rainfall event which is accompanied by lightning and thunder and preceded by strong gusts of winds (usually between 30-50 km/hr). Thunderstorms are dangerous because of the lightning and flash flooding they produce. In extreme events, thunderstorms can create hail and tornadoes.

Thunderstorm forms when a cumulus cloud is pushed further upward by a warm, humid rising column of air called an updraft. The cumulus cloud soon looks like a tower (called towering cumulus) as the updraft continues to develop. Once fully developed, there will be intense rainfall which creates a downward moving column of cool air called a downdraft. When the downdraft and rain-cooled air spreads out along the ground it forms a gust front, or a line of gusty winds.

There are four main types of thunderstorms:

Single Cell Thunderstorms
These have a lifespan of about 30 minutes and are not severe and can therefore be very difficult to predict.

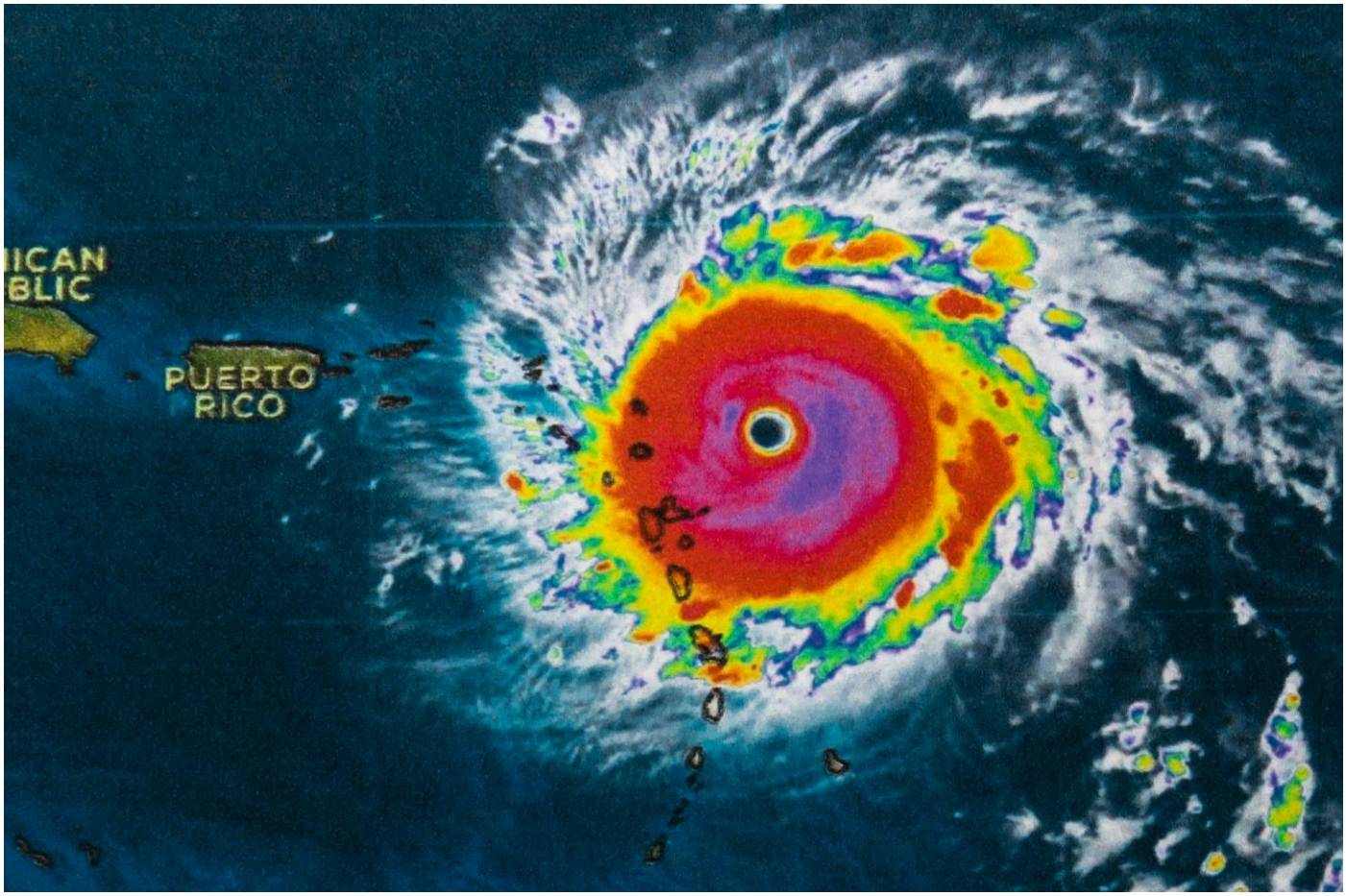
Multi-cell Cluster Storm
This is the most common type of thunderstorm and occurs in a group. Storms of this kind can persist for a few hours and can produce moderate sized hail and weak tornadoes.

Multi-cell Line Storm
This consists of a long line of thunderstorms that can produce hail the size of golf balls and weak tornadoes. Storms of these kinds can easily be predicted with the help of radar.

Super-cell Storms
Although rare, these are highly organized thunderstorms. Storms of this kind pose a high threat to life and property as these can produce strong to violent tornadoes.

1.3.3
Hurricanes

Hurricanes are violent areas of low pressure forming in the tropical Atlantic Ocean from June to November. Hurricanes have winds of 75 miles per hour (mph) or more and are accompanied by torrential rains and along coastal regions storm surge. Hurricanes cause millions of dollars in damage when they affect the Caribbean.



Stages of a Hurricane

STAGE 1

Tropical Disturbance is a discrete weather system of apparently organized convection, originating in the tropics or subtropics and existing for a period of over 24 hours. Disturbances are characteristically approximately 200-600 km in diameter.

STAGE 2

Tropical Depression is a tropical cyclone displaying a closed circulation pattern, in which the maximum sustained wind speed reaches up to but does not exceed 38 mph.

STAGE 3

Tropical Storm is a cyclone, originating over tropical or subtropical waters, with organized deep convection and a closed surface wind circulation around a well-defined center. Once formed, a tropical cyclone is maintained by the extraction of heat energy from the ocean. The sustained wind speeds of Tropical storms ranges from 39 – 73 mph.

STAGE 4

Hurricane is a tropical cyclone with maximum sustained wind of speeds of over 74 mph**.**

Hurricane Classifications

Hurricane strength is classified using the ***Saffir-Simpson Wind Scale***. This scale correlates hurricane strength to barometric pressure, wind speed, and storm surge as shown in the table below.

Table 1. Hurricane Classifications

Category	Barometric Pressure (Inches)	Wind speed (Miles Per Hour)	Storm Surge (Feet)
I - Minimal	Above 28.94	74-95	4-5
II - Moderate	28.50-28.91	96-110	6-8
III - Extensive	27.91-28.47	111-130	9-12
IV - Extreme	27.17-27.88	131-155	13-18
V - Catastrophic	Less Than 27.17	More Than 155	More than 18

Watches and Warnings

Watches and warning are messages from the local meteorological office indicating that adverse weather conditions are expected within a certain period.

Tropical Storm Watch

Tropical storm conditions (sustained winds of 39 to 73 mph) are expected in your area within 48 hours.

Hurricane Watch

Hurricane conditions (sustained winds over 74 mph) are expected in your area within 48 hours.

Tropical Storm Warning

Tropical storm conditions are expected in the area within 36 hours.

Hurricane Warning

Hurricane conditions are expected in the area within 36 hours.

Hurricane Prediction

Although meteorologists now have many ways in which to predict hurricanes, tracking storm movement and landfall remains an inexact science. As hurricanes generally travel across the Caribbean from east to northwest, the windward coastlines of countries tend to feel the first effects.

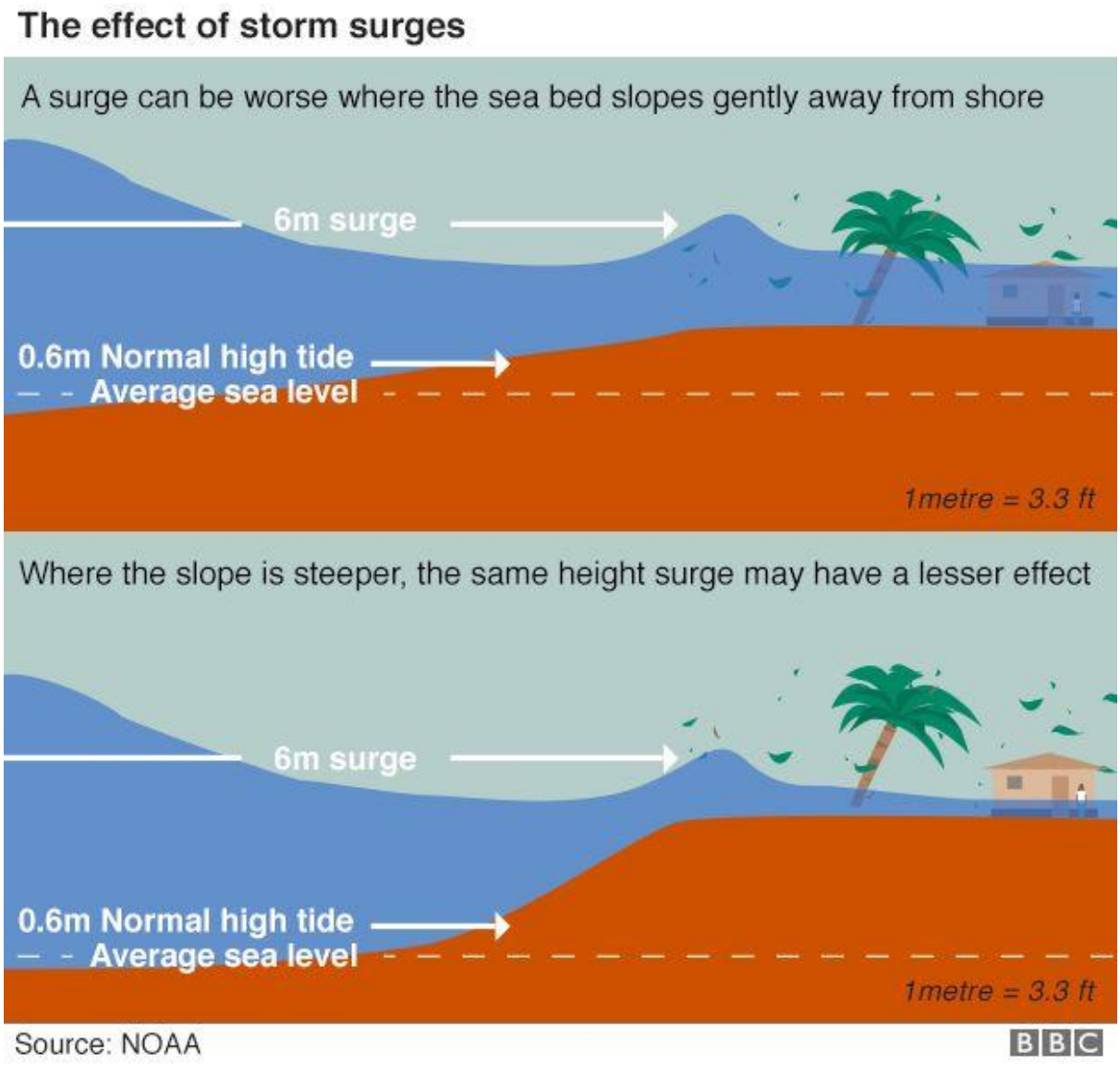
However, there have been hurricanes which moved in the opposite direction, for example Hurricane Lenny (1999) moved from west to east and Hurricane Mitch (1998) moved in a southwesterly direction.

Impacts of Hurricane Dorian to Bahamas
SOURCE: ShaRED

Storm Surge

Tropical storms and hurricanes can generate storm surges which are the abnormal rise of water or higher coastal waves above the predicted tide levels.

This rise in water level can cause extreme flooding in coastal areas particularly when storm surges coincide with normal high tide. In those cases, storm tides can attain a height of up to 20 feet or more.



1.3.4
Tsunamis

Tsunamis are a series of giant waves generated by underwater disturbances such as earthquakes, volcanic activity, and submarine landslides.

Characteristics of a Tsunami

- Wave lengths commonly exceed 100 km
- Deep-ocean velocities of up to 700 km/hour
- A tsunami is often seen as a massive wall of water approaching land.
- There is usually more than one wave and the first is often not the largest.
- Tsunami waves are powerful and often contain dangerous debris such as boats, tress and cars.

Tsunami Waves in Japan
SOURCE: JIJI Press/ AFP/ Getty Images

Predicting A Tsunami

According to the UWI Seismic Research Center, scientists cannot predict when and where an earthquake might occur and so they cannot predict when an earthquake-generated tsunami might occur.

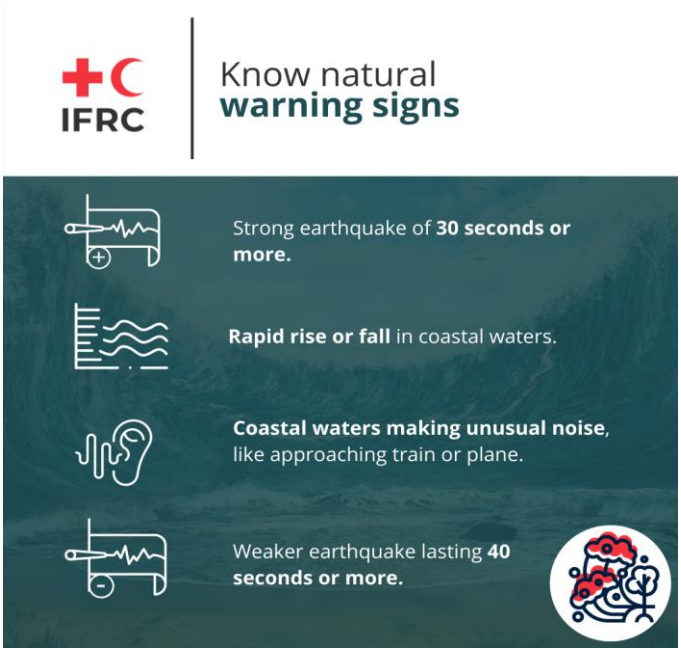
However, tsunamis that are triggered by volcanic activity – like submarine volcanic eruptions or pyroclastic flows - can be forecasted if the volcano is carefully monitored as is the case with volcanoes in the Eastern Caribbean.

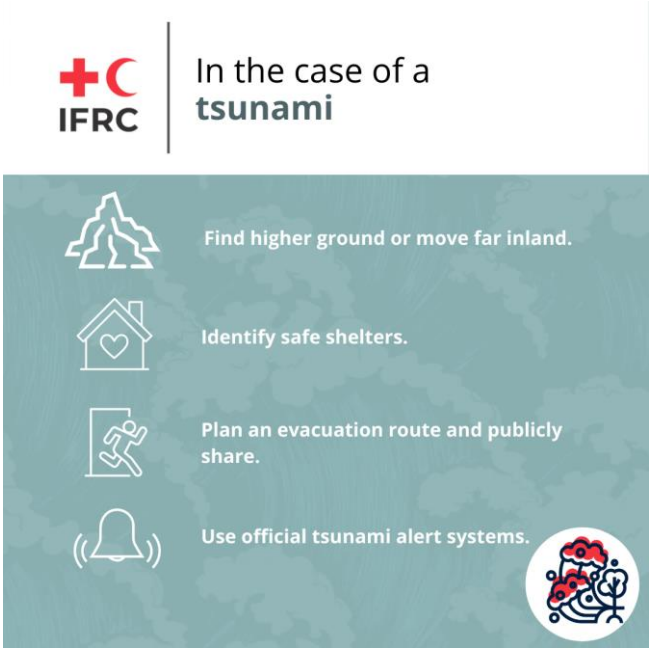
Tsunami Warning Signs

Earthquake generated tsunamis cannot be predicted therefore it is important to know the three tsunami warning signs that you can notice when at the coast.

1) Feel the ground shake or feel an earthquake.
2) See the water receding a noticeable distance.
3) Hear a very loud roar or crashing sound coming from the ocean.

If any or all three of these signs occur, leave the coast immediately.





1.3.5
Floods

A flood occurs any time a body of water rises to cover what is usually dry land. Floods have many causes, including heavy rain, hurricanes and river or gully failure. When flooding occurs, affected areas may sustain damage to structures and personal property, as well as severe damage to the environment in the form of soil erosion and deforestation, and damage to utilities and transportation systems.

Land along rivers and streams and coastlines are particularly susceptible to flooding. Under some conditions, however, even inland areas that are not normally threatened by flooding may be immersed.

Flooding in Jamaica
SOURCE: ShaRED

Flood Classifications

Floods are described by their behavior; there are river basin floods covering large areas, street floods which are very localized and flash floods which are sudden. Floods are measured according to the chance that water flow will equal or exceed a certain level within a time period.

For example the.1:5 yr flood is a moderate event compared to the 1:100 yr flood which can be catastrophic.

River basin floods are associated with prolonged moderate to heavy rainfall e.g. ITCZ. Flash floods occur from short intense burst of rainfall for which there is little or no warning and causes great risk to humans and animals. Severe coastal flooding can also result from a hurricane.

Flood Prediction

Weather satellite technology combined with river gauges and historical data help scientist to predict floods and provide warnings to those in high-risk areas.

Community flood gauge boards are also useful in local areas. Knowing your environment and following the weather warnings help protect against floods.

1.3.6
Volcanoes

Volcanoes are vents or openings in the Earth's crust through which, hot, molten rock (called magma) and gases from the interior of the Earth are released.

Lava dome forms in the crater of the La Soufrière volcano in St. Vincent and the Grenadines due to an eruption in 2021.

Source: NEMO St. Vincent and the Grenadines

Volcanic Effects

- **Pyroclastic Flows** – These contain a mixtures of ash, rock fragments and gas flow from a collapsed eruption column or lava dome. Most pyroclastic flows consist of two parts: a lower (basal) flow of coarse fragments that moves along the ground, and a turbulent cloud of ash that rises above the basal flow.

- **Lava Flows** - These are slow moving streams of molten rock that pour or ooze from an erupting vent. The lava is very viscous and does not flow far from the vent.

- **Ash Fall** - Large quantities of ash produced during a volcanic eruption can be thick enough to destroy vegetation and cause aircraft, ship and car engines to malfunction. They can also be very dangerous to people's health since even the finest fractions of ash may cause serious respiratory problems if they are inhaled.

- **Lahars** - These are mixtures of volcanic water and rock fragments which rush down the slopes of a volcano and into the surrounding valleys. It should be noted that Lahars can occur with or without a volcanic eruption.

- **Volcanic Gases** - Sulphur dioxide (SO2), and hydrogen sulphide (H2S) are present in toxic amounts close to the vent of an erupting volcano and may be present close to hot springs around any live volcano.

Ash fall from the La Soufrière volcano eruption in St. Vincent and the Grenadines in 2021.

Source: UWI Seismic Research Centre

1.3.7

COVID-19

The Coronavirus disease is a highly contagious respiratory disease that can be spread from person to person.

What are the Symptoms?

People with COVID-19 tend to experience fever, tiredness, and a dry cough. Some patients may have aches and pains, nasal congestion, runny nose, sore throat or diarrhea. People with fever, cough and difficulty breathing should seek medical attention. Some people become infected but don’t develop any symptoms and don't feel unwell.

How is COVID- 19 Spread?

COVID-19 can spread from person-to-person through small droplets from the nose or mouth which are spread when a person with the virus exhales or coughs. These droplets land on objects and surfaces.

Persons can catch COVID-19 by touching where the droplets are and then touching their eyes, nose or mouth. They can also catch COVID-19 if they breathe the droplets from a person who is sick. It is important to wash hands often and stay more than 6 feet away from a person who is sick.

1.4

Impact of Disasters on Community Resources

When a disaster occurs, it has a cascading effect because of its impact on the infrastructure: transportation, utilities, communications systems, fuel supplies, and water supplies the services and delivery systems on which we depend.

When one of these important elements in our support system breaks down, it has a domino effect, causing other elements to falter. When multiple elements break down, the effect can be crippling. Some of the ways in which the infrastructure can be affected in a disaster or emergency are shown in the table below.

	Effects
Transportation	Inability to get emergency service personnel into the affected area. Inability to transport victims away from the area.
Electrical	Increased risk of fire and electrical shock. Possible disruption to transportation system if downed lines are across roads.
Telephone	Lost contact between victims, service providers, and family members. System overload due to calls from or to friends or relatives.
Water	Disruption of service to homes, businesses, and medical providers. Inadequate water supply for firefighting. Increased risk to public health if there is extensive damage to the water supply or if it becomes contaminated.

Some types of damage and their effects on emergency services are shown in the table below.

Type Of Damage	Effect On Disaster Services
Road	• Inability to assess damage accurately. • Ambulances prevented from reaching victims and/or victims prevented from reaching emergency medical services. • Police prevented from reaching areas of civil unrest. • Fire departments prevented from getting to fires. • Flow of needed supplies is interrupted.
Structural	• Damaged hospitals unable to receive patients. • Increased risk of injury from falling debris.
Disrupted Communication	• Victims unable to call for help. • Coordination of services is hampered.
Fuel Line Damage	• Fire and paramedic services overburdened.
Disrupted Water Service	• Firefighting capabilities restricted. • Medical facilities hampered.

1.4.1

Structural and Nonstructural Threats

During and following a disaster, damage to building structures presents one of the greatest effects of a disaster. Damage will vary according to the type of disaster, the type and age of the structure, and location in relation to the disaster center. The following is an overview of disaster impacts related to building structures and their contents.

Disaster Impacts Related To Structure Type

Hazards in and around buildings depend largely on the age and condition of the structure.

Hazards may include:

- Collapsed walkways and stairways.
- Broken glass.
- Collapsed roofing or walls

Nonstructural Disaster Impacts

Fixtures and items within a home, can pose hazards during or after a disaster event. The following are examples of some of the nonstructural hazards that may be encountered:

- Gas line breaks.
- Damage from falling books, dishes, or other cabinet contents.
- Risk of injury or electric shock from exposed lines.
- Hazardous products within reach of children. e.g. kerosene oil or pesticides

Reducing Structural and Nonstructural Impacts

Many injuries from structural and nonstructural hazards are easily preventable. Some steps that you can take to reducing structural and nonstructural hazards are shown in the table below.

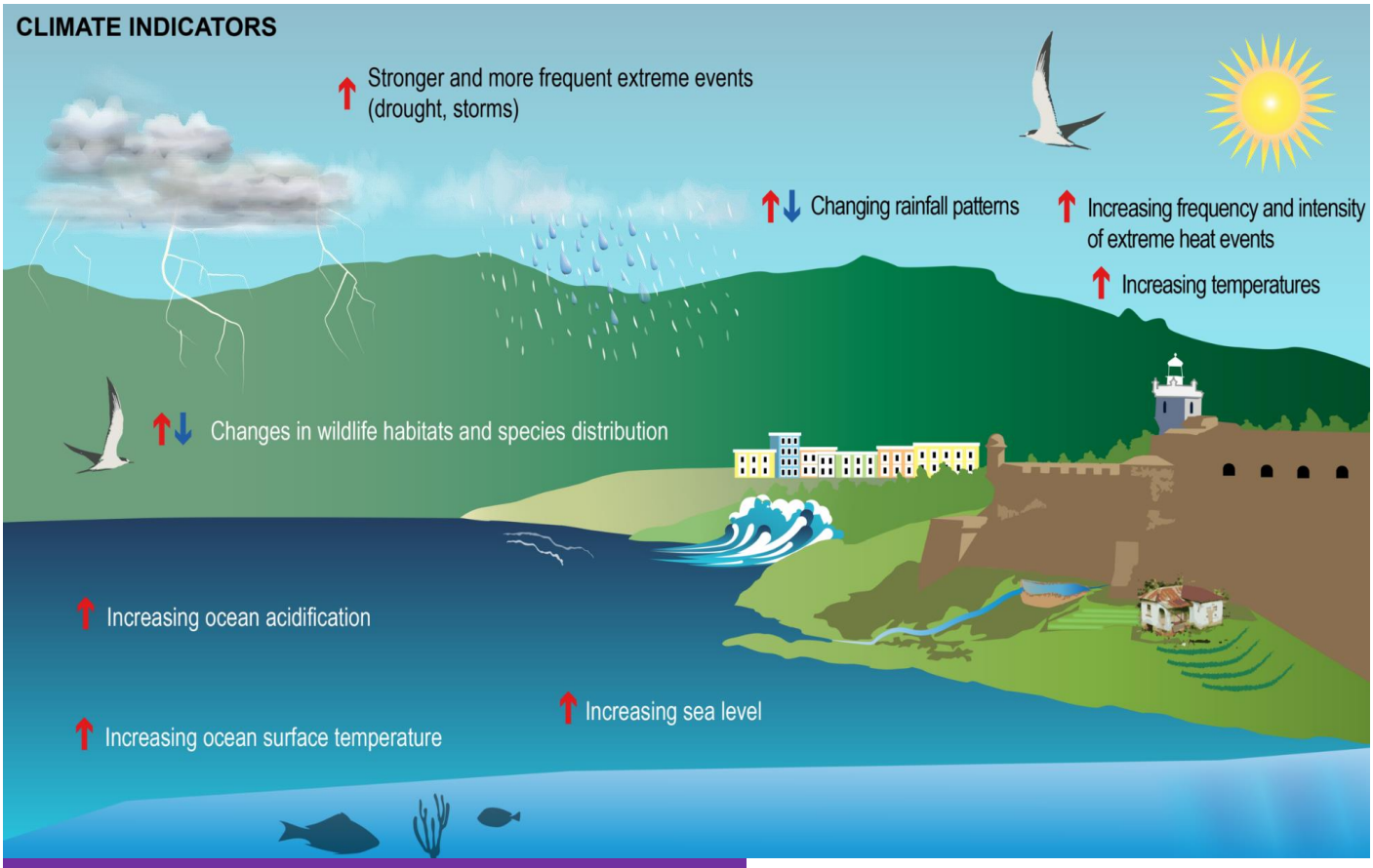
Type Of Impact	Precautions
Structural	Bolt older houses to the foundation. Board or place protective tape on windows and glass doors to minimize flying glass.
Nonstructural	Anchor such furniture as bookshelves to the wall. Locate and label gas, electricity, and water shut-offs before disasters occur. After a disaster, shut off the utilities as needed to prevent fires and other risks. Store a shut-off wrench where it will be immediately available.

1.5 CLIMATE CHANGE

What is Climate change?

Climate change is a long-term change in the average weather patterns that have come to define local, regional and global climates.

These changes come as a result of the burning of fossil fuels, deforestation and other harmful practices that increase the concentration of greenhouse gases (carbon dioxide, methane and nitrous oxide etc.) in the atmosphere.



Source: U.S. Caribbean of the 4th National Climate Assessment (2018)

Effects of Climate Change

- **Increase In Temperature** – The Intergovernmental Panel on Climate Change (IPCC) estimated that by 2100, the global average surface warming (surface air temperature change), will increase by 1.1 - 6.4 °C.

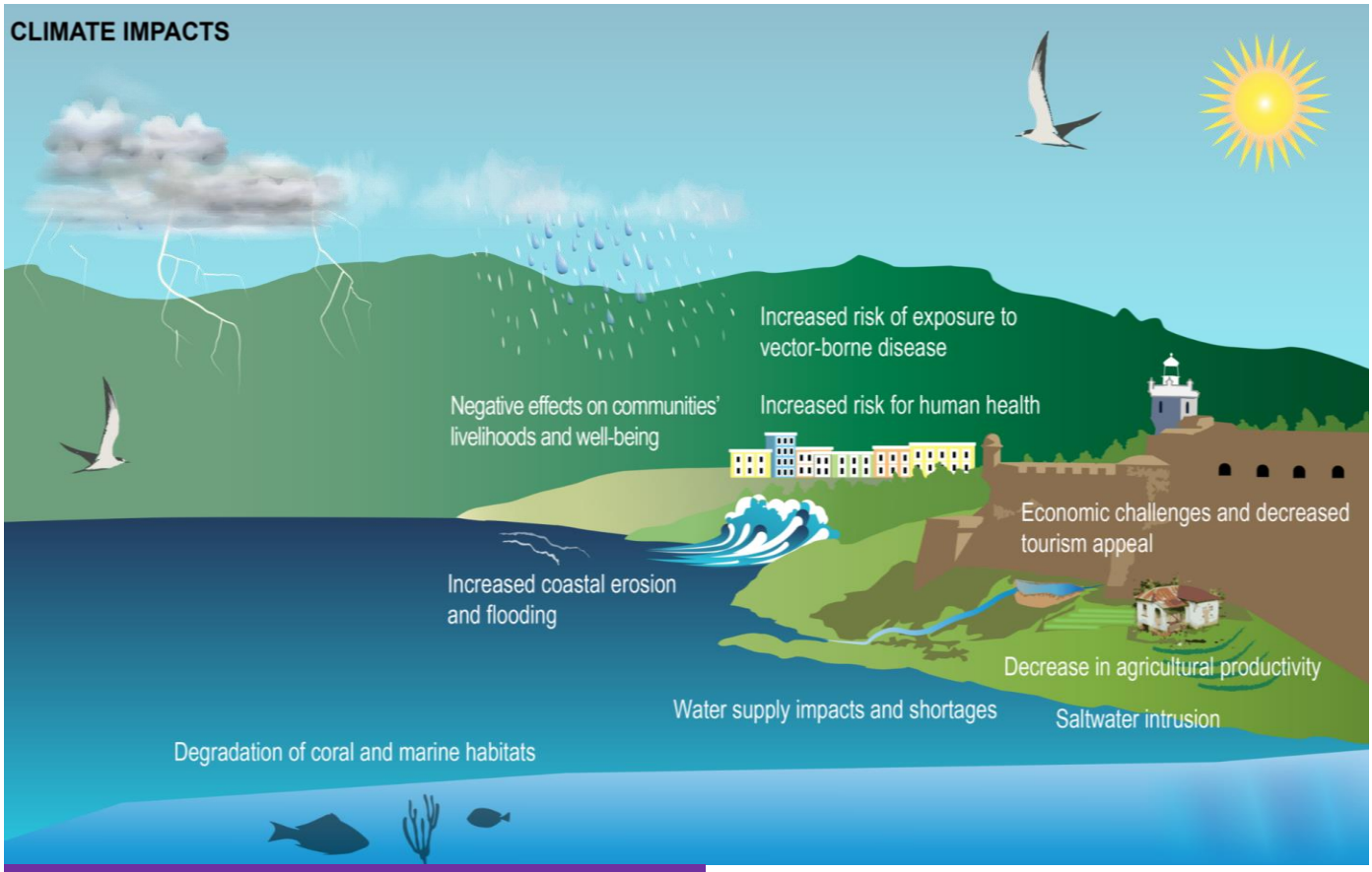
- **Changes In Precipitation Patterns** – More precipitation is expected in higher latitudes while less precipitation is expected in most subtropical land areas.

- **More Droughts and Heat Waves** – There will be more drought-affected areas as it is expected that hot extremes and heat waves will become more frequent.

- **Stronger and More Intense Hurricanes** – The intensity, frequency and duration of hurricanes are expected to increase due to increases of sea surface temperatures.

- **Sea Level Rise** – It is estimated that the sea level will rise by 18 – 59 cm by 2100.

- **Increase Ocean Acidification** – The ocean naturally absorbs carbon dioxide from the atmosphere. The more carbon dioxide there is in the atmosphere, the more the ocean absorbs, and this is causing oceans to become more acidic which negatively impact corals and other marine animals and encourages the growth of algae and seagrasses.



Source: U.S. Caribbean of the 4th National Climate Assessment (2018)

What's Climate Change Adaptation?

Climate change adaptation involves reducing the risk and vulnerabilities by putting measures in place or by building the capacity of cities, communities and individuals to cope with adverse climate impacts.

Climate change adaptation is therefore similar to disaster mitigation and both must be done in order to reduce the risk and vulnerability to hazards such as hurricanes, thunderstorms, flooding and drought.

You should now be able to:

- ✓ Understand disaster management terms.
- ✓ Learn about the different hazards.
- ✓ Understand how disasters can affect communities.
- ✓ Prepare against disasters and adapt for climate change.

Additional Resources:

1. UNDRR Terminology: Terminology | UNDRR
2. CDEMA Virtual Library: CRIS - Virtual Library (cdema.org)
3. ISDR Briefing Note Climate Change and Disaster Risk Reduction: https://www.unisdr.org/files/4146_ClimateChangeDRR.pdf
4. National Geographic Thunderstorms: https://www.youtube.com/watch?v=zUNEFefftt8

UNIT 02

CDRT & Disaster Preparedness

IFRC

CaDRiM Reference Centre
Caribbean Disaster Risk Management

DOMINICA RED CROSS

USAID
FROM THE AMERICAN PEOPLE

OBJECTIVES

In this unit you will learn about:

.

Home Preparedness

How you can prepare in advance to reduce structural and nonstructural hazards and survive the initial period

Community Preparedness

How you can help your community prepare for the worst, depending on the nature of the disaster.

Actions To Take Before, During and After Disasters

At the end of this unit, you should be able to:

- ✓ Identify steps to prepare for and mitigate the effects of hazards.
- ✓ Have a checklist of the steps to be carried out before, during and after a disaster strikes.

USE THIS EXERCISE

ASK A QUESTION? Show the picture and ask what they think happened. Remember not to make it feel like a test, keep the environment comfortable.

2.1
Preparedness

What is Preparedness?

Activities and measures taken in advance to ensure effective response to the impact of hazards, including the issuance of timely and effective early warnings and the temporary evacuation of people and property from threatened locations.

CDRT members have a responsibility to help their community prepare for a disaster. This help can take many forms.

2.1.1
CDRT's Role

When it comes to disaster preparedness, CDRTs are expected to help in the following ways:

1) **Education and Training** – Community preparedness is about sharing information with your community and ensuring that they understand what can happen and what they can do. CDRTs can help educate the community on ways in which they can prepare for and respond to a disaster. When engaging with the community, it is important to know the facts and have evidence to support the need for community preparedness.

2) **Development of Disaster Plans** – Disaster plans such as a Family Emergency Plan and a Community Disaster Plan can help with reducing the risks and vulnerabilities faced as they contain strategies for mitigating and reducing the impacts of disasters. CDRTs can assist with the development of these plans. Testing plans is also important as it would help to identify any gaps that exist as well as help persons to understand their individual roles.

3) **Evacuation Plans** – Having an evacuation plan is essential to emergency planning. CDRTs can assist the community and individuals with developing evacuation plans.

4) **Establishing an Early Warning System** - A self-managed community-based early warning system can be established whereby persons from the community can receive timely communication about an emergency or disaster. The CDRT can engage with the community to establish an early warning system.

5) **Practice and Testing** – Test the disaster and evacuation plans created to determine any gaps and identify ways to improve overall resilience.

2.1.2
Taking Part In The Process Of Community Mapping

As part of the Community Disaster Preparedness Program, all communities are asked to identify their strengths and weaknesses, as well as the main threats in the event of a disaster. This information should be mapped out as part of the community disaster planning phase.

CDRT members should assist in this process and learn to identify the vulnerabilities of the community in the event of a disaster, as well as the capacities to respond. This could be done by using the Roadmap to Resilience approach which is a combination of conducting a Vulnerability and Capacity Assessment and measuring six (6) resilience characteristics and dimensions. It is process that is community driven which allows the community to identifying their hazards, vulnerabilities, threats and capacities and apply their knowledge to find their own solutions.

2.1.3
What Are The Six Resilience Characteristics?

Knowledgeable and healthy and can meet their basic needs: Persons are aware of the various risks and vulnerabilities and their capacity to take actions to increase their resilience. Persons can meet their food, water and shelter needs.

Socially cohesive: The existence of social groups within the community and the lack of major conflicts within the community.

Economic opportunities: Persons have access to livelihood opportunities and can cover their health, education and nutrition needs daily.

Well maintained and accessible infrastructure and services: Access to healthcare and education facilities and emergency services.

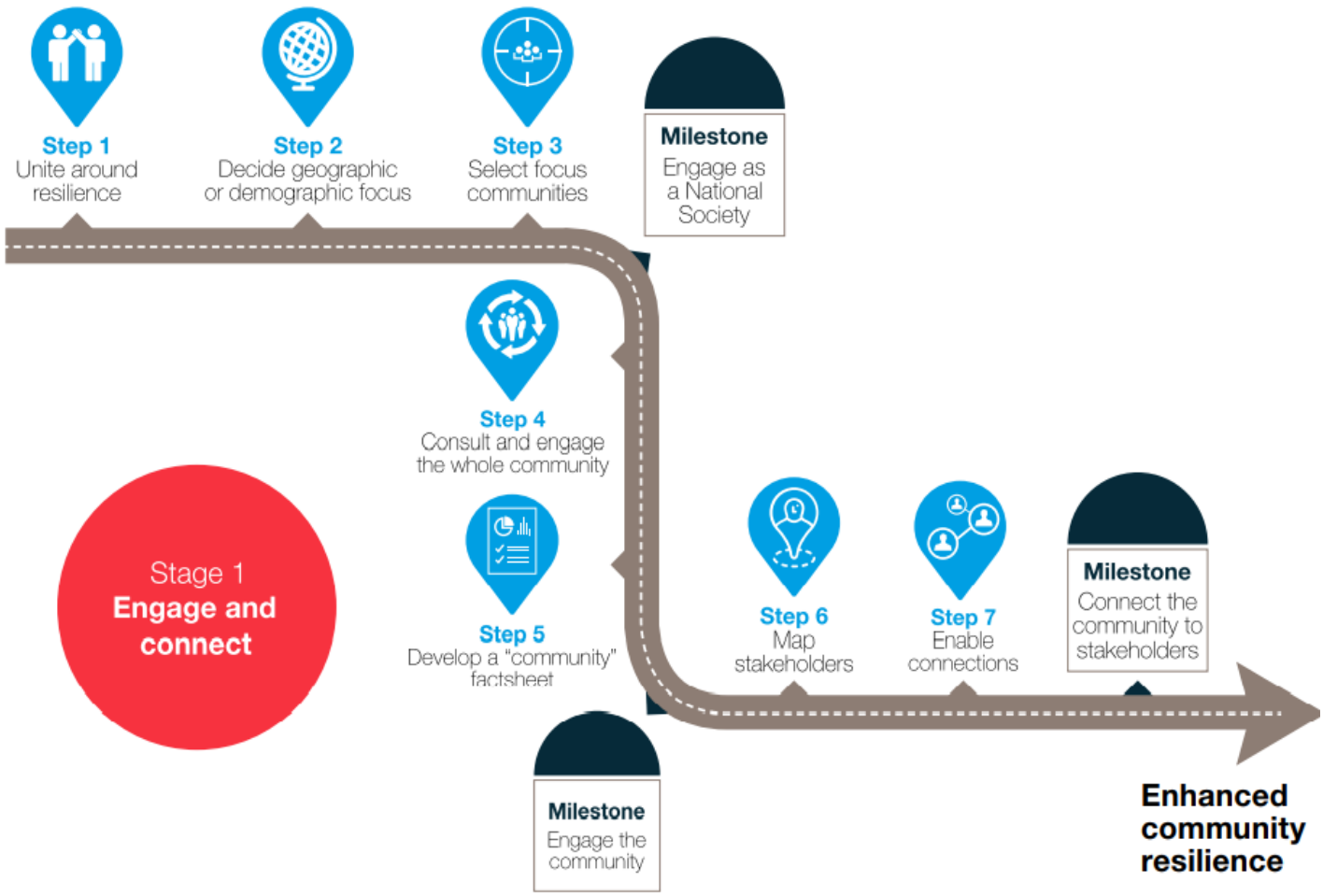
Can manage its natural assets: Natural forests, vegetation and wetlands are maintained.

Is connected: persons are aware of relevant policies and laws and how those can affect the community.

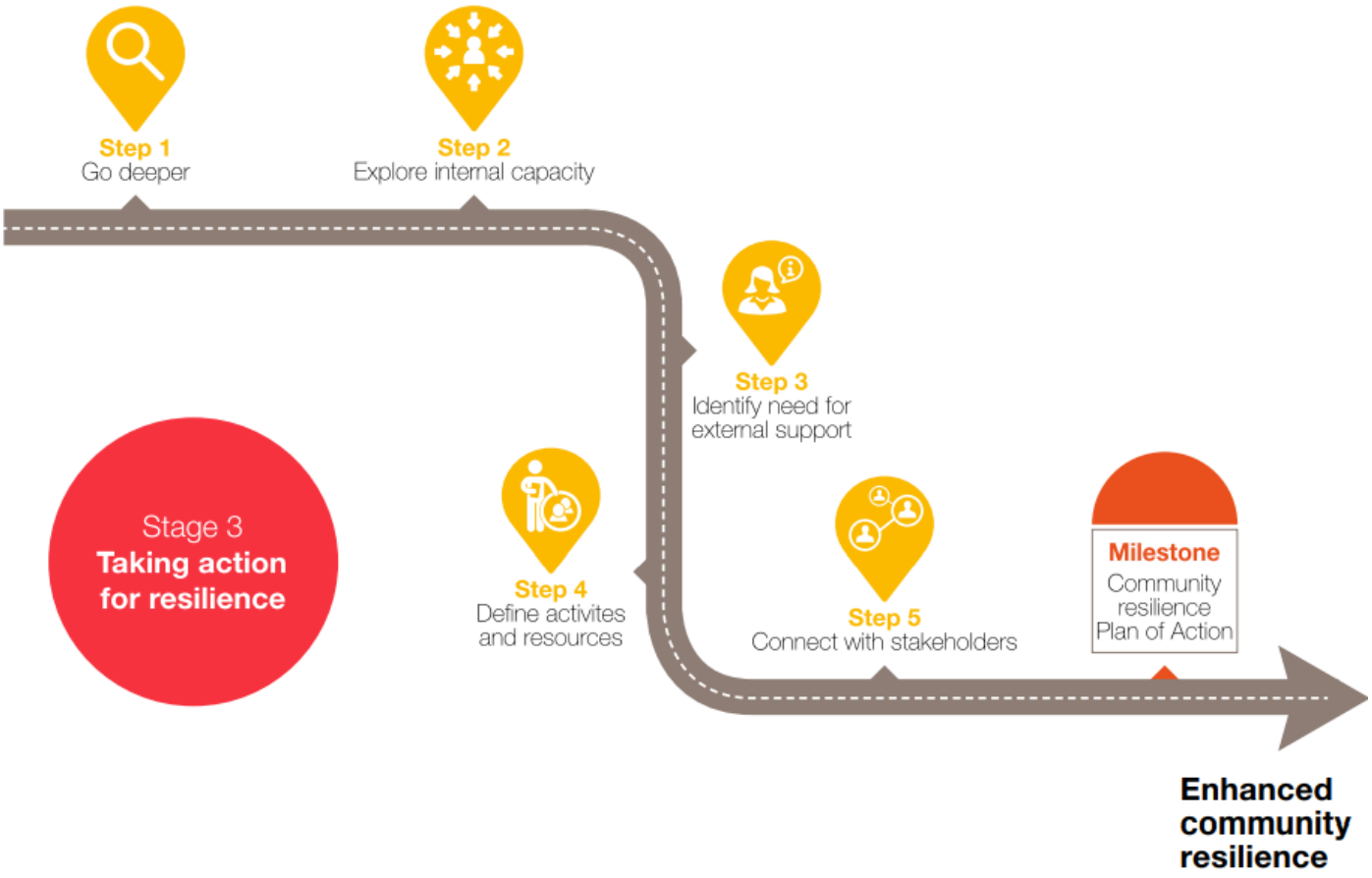
The community will then use this information to develop a community plan and engage with stakeholders such as its National Society to help with evaluating their plan. Remember that community plans should be shared with the local National Society and even the National Disaster Office.

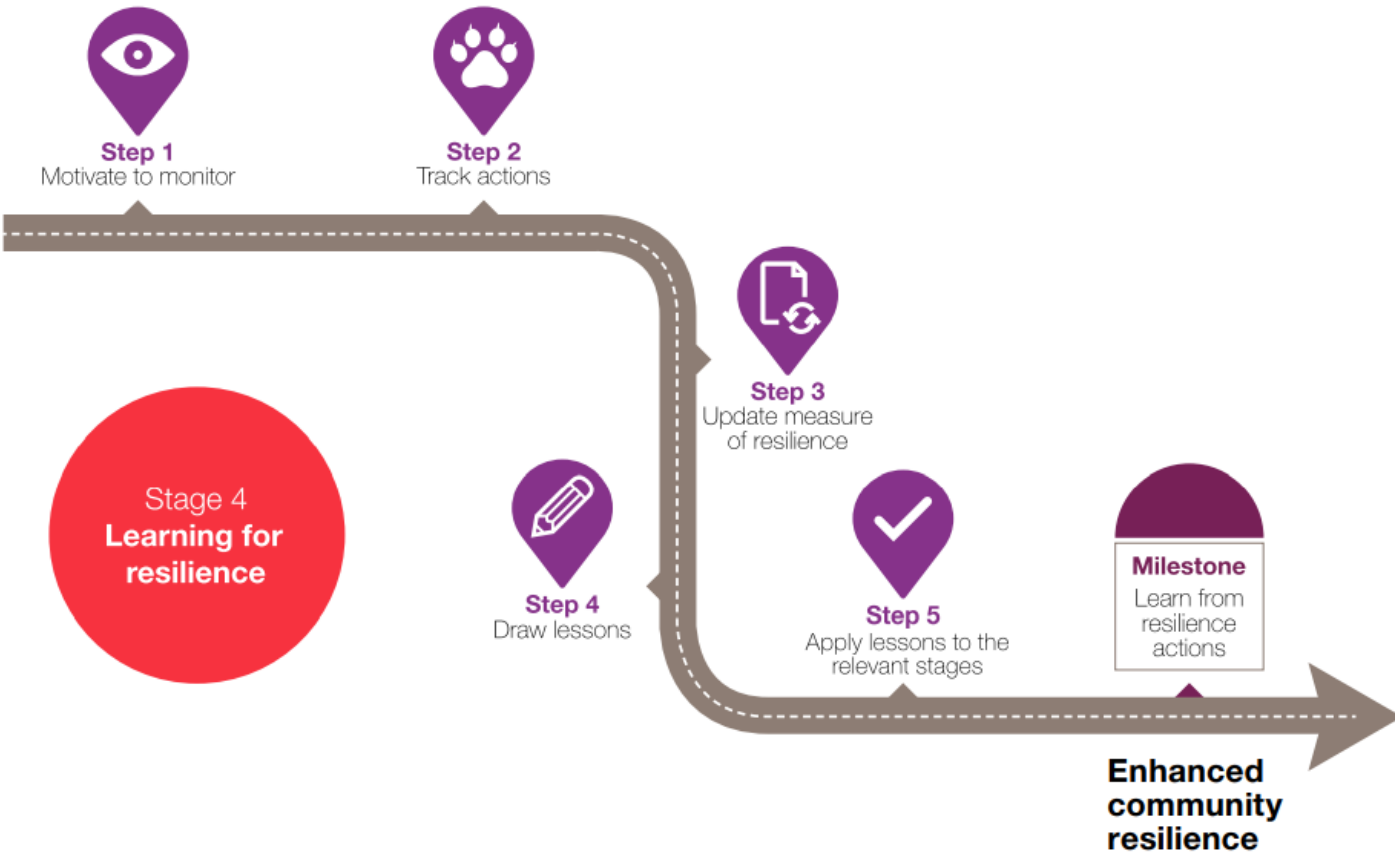
2.1.4
What Are The Stages Used In The Roadmap To Resilience Approach?

The Roadmap to Resilience approach contains the following stages:




Step 1
Agree on purpose and scope
Step 2
Choose approach
Milestone
Prepare the assessment
Step 3
Identify main threats
Step 4
Contextualize the characteristics
Step 5
Convert descriptions to indicators
Step 6
Collect primary data
Step 7
Analyse data
Step 8
Score characteristics
Step 9
Sum and conclude
Milestone
Measure community resilience
Stage 2
Understand community risk and resilience
Enhanced community resilience


Step 1
Go deeper
Step 2
Explore internal capacity
Step 3
Identify need for external support
Step 4
Define activites and resources
Step 5
Connect with stakeholders
Milestone
Community resilience Plan of Action
Stage 3
Taking action for resilience
Enhanced community resilience


Step 1
Motivate to monitor
Step 2
Track actions
Step 3
Update measure of resilience
Stage 4
Learning for resilience
Step 4
Draw lessons
Step 5
Apply lessons to the relevant stages
Milestone
Learn from resilience actions
Enhanced community resilience

2.2

Creating Family Disaster Plans

Each CDRT member can help families in his/her neighborhood make a disaster plan

To get started:

- ✓ Meet with the family.
- ✓ Discuss the community's risks and vulnerabilities to potential hazards as well as their capacity to deal or cope with a hazard impact. This discussion can also allow for the identification of micro-projects which can reduce potential danger and damage.
- ✓ Explain how to prepare an emergency kit and what goods to stock up on in the event of an emergency.
- ✓ Discuss how to respond in the event of an emergency.
- ✓ Discuss what to do if advised to evacuate.
- ✓ Help the family plan how it will stay in contact if separated by disaster by:

1. Identifying two meeting places:
   - A location a safe distance from your home in case of a localized emergency such as a fire.
   - A place outside your neighborhood in case you can't return home.

2. Choosing an out-of-area family member or friend as a "check-in contact" for everyone to call.

- ✓ Educate families about the importance of:
  - Posting emergency telephone numbers by every phone.
  - Showing all family members how to shut off water, gas, and electricity at main switches and when to do so.

Ask your national disaster office or local national society if they have a family disaster or emergency disaster plan booklet which you use.

2.2.1
Evacuation Planning

The family should develop an escape plan that provides for escape from every room.

As part of the escape plan:

- Consider the needs of children and physically challenged individuals.
- All family members must be informed of the plan.
- The family must run practice escape drills.

2.2.2
Assembling And Storing Survival Supplies

CDRT members can also help families to assemble a Disaster Supplies Kit. Once disaster hits, families won't have time to shop or search for supplies. But if they've gathered supplies in advance, they are ready for an evacuation, emergency shelter or home confinement.

To Prepare a Kit

1. Review the checklist on the next few pages.
2. Gather the supplies that are listed.

Water

Store water in clean plastic containers. Avoid using containers that will decompose or break, such as glass bottles. A normally active person needs to drink at least 2 quarts (2.3 liters) of water each day. Hot environments and intense physical activity can double that amount. Children, nursing mothers, and ill people will need more.

If you have questions about the quality of the water, purify it before drinking. You can heat water to a rolling boil for 2 minutes. You can also use household liquid chlorine bleach. To purify water, use the following table as a guide:

WATER QUANTITY	BLEACH ADDED
1 Quart (1.13 liters)	4 Drops
1 Gallon (4.5 liters)	16 Drops
5 Gallons (22.7 liters)	1 Teaspoon

Ratios for Purifying Water with Bleach

After adding bleach, shake or stir the water container and let it stand thirty (30) minutes before drinking.

How Much Water?

Store 2 gallons (9 liters) of water per person per day (1 gallon (4.5 liters) for drinking, 1 gallon for food preparation/ sanitation.)

Keep at least a 3-day supply of water for each person in your household.

Food

Store at least a 3-day supply of nonperishable food. Select foods that require no refrigeration, preparation, or cooking and little or no water. If you must heat food, pack 'Sterno' – the small cans of fuel used by caters. Select food items that are compact and lightweight in your Disaster Supplies Kit, such as:

- Ready-to-eat canned meats, and vegetables
- Canned juices, long life and condensed milk
- Sugar, salt, pepper, high-energy foods- peanut butter, jam, crackers
- Vitamins
- Foods for infants, elderly persons or persons on special diets
- Comfort/stress foods cookies, candy, sweetened cereals, lollipops,
- Instant coffee, tea bags

First Aid Kit

Assemble a first aid kit for your home and one for each car.

A first aid kit* should include:

- ☐ Sterile adhesive bandages in assorted sizes
- ☐ 2-inch sterile gauze pads (4-6)
- ☐ 4-inch sterile gauze pads (4-6)
- ☐ Hypoallergenic adhesive tape
- ☐ Triangular bandages (3)
- ☐ 2-inch sterile roller bandages (3 rolls)
- ☐ 3-inch sterile roller bandages (3 rolls)
- ☐ Scissors
- ☐ Tweezers
- ☐ Antiseptic
- ☐ Assorted sizes of safety pins
- ☐ Cleaning agent/soap
- ☐ Non-latex gloves (2 pair)

Nonprescription Drugs

- ☐ Aspirin or nonaspirin pain reliever
- ☐ Anti-diarrhea medication
- ☐ Antacid (for stomach upset)

Prescribed Medication

Ensure that you have prescribed medication or medication for your personal use. It is very important to note that these medications for your personal use ***should not*** be shared with or administered to anyone.

Tools & Supplies

▪ Emergency preparedness manual* ▪ Battery-operated radio and extra batteries ▪ Flashlight and extra batteries ▪ Cash	Can opener, utility knife Pliers, hammer, saw, cutlass/machete, nails (lg) Tape, rope Raincoat, boots, gloves
▪ Matches in a waterproof container ▪ Plastic storage containers ▪ Paper, pencil ▪ Toilet paper, ▪ Soap ▪ Feminine supplies*	**Sanitation** Personal hygiene items* toiletries Plastic garbage bags, ties Plastic bucket with tight lid Alcohol swaps or alcohol wipes Household chlorine bleach
▪ Sturdy shoes or work boots ▪ Rain gear ▪ Blankets	Hat and working gloves Sheet or blanket

Special Items

Remember family members with special needs, such as infants and elderly or disabled persons.

For Baby

- Formula
- Diapers
- Bottles
- Powdered milk
- Medications

For Adults

- Heart and high blood pressure medication
- Insulin
- Prescription drugs
- Denture needs
- Extra eye glasses

- Important Family Documents Keep these records in a waterproof, portable container.
- Will, insurance policies, contracts, deeds
- Passports, immunization records
- Bank cards and account numbers
- important telephone numbers
- Family records (birth, marriage, death)

2.3

Ensuring That People Know What To Do

The CDRT members must be able to help their neighbors prepare for disaster. They must act as focal points for any requests the community may have.

In the following pages are several tips to be shared to plan for earthquakes, floods and hurricanes, volcanoes and tsunamis.

HURRICANES

BEFORE

Know the risks of the area, the evacuation routes and the location of shelters.

- Have a home hurricane plan of action.
- Know what a hurricane “watch” and “warning” mean. [Note: A hurricane watch means a hurricane may hit your area. A hurricane warning means such a hurricane is headed for your area.]
- Have a portable radio and flashlight, as well as other supplies.
- Ensure that enough nonperishable food and water supplies are on hand to last for at least 2 weeks.
- Flood-proof your home.
- Keep trees and shrubbery trimmed.

HURRICANES

DURING

Watch and Warning Phases (within 36 - 48 hours before landfall):

- Board up all windows.
- Check batteries and stock up on canned food, medical supplies, and drinking water.
- Bring in outside objects (e.g., garbage cans, lawn furniture, bicycles).
- Listen to the advice of local officials and evacuate if told to do so.

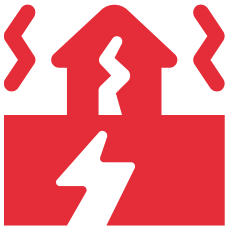
During the Hurricane

- If you are not advised to evacuate, stay indoors and away from windows.
- Stay away from flood waters; never drive through them.
- Be aware of the calm “eye”; the storm is not over.

HURRICANES

AFTER

- Wait until an area is declared safe before entering.
- Use a flashlight to inspect for damage including gas, water, and electrical lines and appliances
  Stay away from downed power lines.
- If you smell gas of if there is a fire, turn off the main gas valve. Switch off individual circuit breakers (or unscrew individual fuses), then switch off the main circuit breaker (or unscrew the main fuse).
- Do not use telephones except in emergencies.
- Use a portable radio for information from officials.
- Stay out of flood waters.



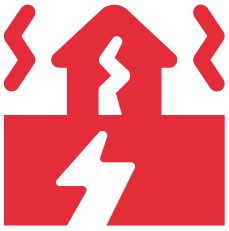
EARTHQUAKES

BEFORE

- Have a home earthquake plan and know what to do after the earthquake occurs.
- Have a plan for reuniting all family members after an earthquake occurs.
- Have supplies on hand including water, a flashlight, a portable radio, food, a fire extinguisher, and tools.
- Bolt bookshelves and water heaters into wall studs, and latch cabinets.
- Move beds away from windows.
- Move pictures and other hanging objects away from beds.
- Keep a pair of shoes next to your bed.

DURING

- Drop, cover, and hold.
- Get under a heavy table or desk and hold on or sit or stand against an inside wall.
- Keep away from windows.
- If indoors, stay there.
- If outdoors, stay outdoors away from falling debris, trees, and power lines.
- If in your car, drive to a clear spot and stay in the car. Avoid stopping on or under bridges



EARTHQUAKES

AFTER

- Expect aftershocks. They are just as serious as the main earthquake.
- Put on shoes to protect from broken glass.
- Check for injuries and fires.
- Use a flashlight to inspect your residence for damage including gas, water, and electrical lines and appliances.
- If you smell gas of if there is a fire, turn off the main gas valve. Switch off individual circuit breakers (or unscrew individual fuses), then switch off the main circuit breaker (or unscrew the main fuse).
- Do not go into damaged areas.
- Do not use telephones except in emergencies.
- Do not use vehicles except in emergencies.
- Use a portable radio for information.
- If your home is unsafe, get everyone out.

FLOODS

Early Warning

CDRTs play a key role to alert and help move to safety vulnerable families in their community. However, the early warning should ***in no case*** put the CDRTs at risk.

BEFORE

- ☐ Know the flood risk and the elevation of the area.
- ☐ Prepare a home flood evacuation or escape plan.
- ☐ Keep insurance papers, important documents, and other valuables in a safe-deposit box or in a waterproof bag.
- ☐ Have a family plan and choose a safe area in advance.
- ☐ Have a portable radio, flashlight, and emergency supplies.
- ☐ Stock up on sandbags.
- ☐ Move furniture and other items to higher levels.
- ☐ Listen to radio or TV for up-to-the-minute information from officials.

FLOODS

Early Warning

CDRTs play a key role to alert and help move to safety vulnerable families in their community. However, the early warning should ***in no case*** put the CDRTs at risk.

DURING

- Use telephones only for life-threatening emergencies. If necessary, switch off electricity
- Evacuate, if necessary, and follow instructions.
- Do not walk or drive through flood waters.
- Stay off bridges where water is covering them.
- Heed barricades blocking roads.
- Keep away from waterways during heavy rain. If you are in a valley area and hear a warning, get to high ground immediately.
- Keep out of storm drains and gullies.

FLOODS

Early Warning

CDRTs play a key role to alert and help move to safety vulnerable families in their community. However, the early warning should ***in no case*** put the CDRTs at risk.

AFTER

- Listen to a portable radio for information from officials.
- Boil drinking water before using (rolling boil for 10 minutes).
- Use a flashlight to check for damage including gas, water, and electrical lines and appliances.
- If you smell gas or if there is a fire, turn off the main gas valve. Switch off individual circuit breakers (or unscrew individual fuses), then switch off the main circuit breaker (or unscrew the main fuse).
- Stay out of the disaster area.

TSUNAMIS

BEFORE

- Prepare a home evacuation or escape plan.
- Keep insurance papers, important documents, and other valuables in a safe-deposit box or in a waterproof bag.
- Have a family plan and choose a safe area in advance.
- Have a portable radio, flashlight, and emergency supplies.
- Listen to radio or TV for up-to-the-minute information from officials.

TSUNAMIS

DURING

- Keep listening to the radio or TV for information from officials.
- Follow any evacuation orders issued by authorities
- Activate your family emergency plan.
- If asked to stay indoors, ensure that all windows and doors are kept closed.
- In the event of ashfall, seal your windows and door frames with wet rags.
- Avoid low-lying areas
- Bring all animals and livestock in closed shelters.
- Put all machinery inside a garage or cover them with large tarps.
- Cover water tanks and other deposits so they do not become contaminated by ash.
- If you have to go out, use mouth guards, long sleeve clothes, protective glasses and a cap.

TSUNAMIS

AFTER

- Listen to a portable radio or TV for information from officials.
- Let friends and family know that you are safe.
- If evacuated, do not return to your home unless authorities say it is safe to do so.
- Stay out of the disaster area.
- Do not use telephones except in emergencies.

2.4
Early Warning Systems

2.4.1
What Is An Early Warning System?

It is an integrated system of hazard monitoring, risk assessment, communication and preparedness activities that enables individuals and communities to take timely action to reduce loss of life and damage to property in advance of a hazard impact or disaster.

An early warning system should be included in the Community Disaster Plan.

2.4.2
What to Consider When Developing an Early Warning System

Consider the following when determining an effective community-based early warning system:

1) Consider the risks and vulnerabilities of the community and the type of hazards that can affect the community.

2) Is there a way for the community to predict and monitor possible hazard impacts?

3) What can be used to send warning messages to community members?

4) What type of information should be included in the warning messages?

5) Who will be responsible for monitoring hazards and sending information to the community?

6) What type of response is needed?

Your community must be empowered to act once it is warned. Warning messages should be clear and logical and should be from a source that people respect and will respond to. It is about reaching the vulnerable in a timely manner and putting systems in place before so that people know what to do.

2.5
Inclusivity in All Disaster Plans

When developing any plans always engage with and take into consideration any requirements of persons within vulnerable or marginalized groups.

Persons within these groups include women and girls, the elderly, low-income households, persons living with physical, sensory or intellectual disabilities, persons with mental health disabilities, persons living with HIV/AIDS or other chronic illnesses, migrants and survivors of sexual and gender-based violence.

2.5.1
Steps In Integrating Vulnerable Groups

The following are some ways in which persons in vulnerable and marginalized groups can be included in the disaster preparedness phase and ways to ensure their safety in the event of a disaster:

1) Identify these persons within the community and get their contact information.

2) Include them when conducting assessments.

3) Determine what type of assistance they might need in an emergency, which also includes assistance needed during an evacuation.

4) Determine their preferred mode of communication to receive information so that information can be relayed to them before, during and after an emergency.

5) Discuss ways to prepare which include the development of a family emergency plan and evacuation plan.

2.6

Preparing for A CDRT Deployment

CDRT Preparedness checklist (in ‘peacetime’, to be updated every month):	
	Are there committed individuals in each of the community’s neighborhoods who are aware of the community’s disaster plan and willing to contribute?
	Do these individuals have specialist skills or interests in relation to Community Disaster Response Team mandate (First Aid, Shelter, Health, Relief…)?
	Where are these persons located, and do they know what to do in the event of a disaster?
	Who will help the most vulnerable to reach a safe shelter?
	Who will check on the status of the utilities in the community?
	Do the CDRT members know who will carry out the damage and needs assessment for each of the neighborhoods in the community? Do they have the forms?
	Who is trained in the use of the different forms?
	Who oversees the overall coordination and assessment if the Team Leader is not available?

	How can the team members be contacted? How can they be contacted if the telephone network breaks down?
	Can each CDR coordinator (Health, Shelter, Relief) contact easily all of his/her team members?
	Where will the team meet for briefings?
	Are all CDR Team members capable of responding if their family or their home is affected?

This information can be share with the local National Disaster Office and the Red Cross National Society so that points of contact can be established which will allow for better exchange of information in the event of a hazard impact or disaster.

2.5

Preparing for A CDRT Deployment

CDRT Preparedness checklist (in ‘peacetime’, to be updated every month):	
	Who is available for immediate deployment, as well as being on stand-by as a hazard looms closer?
	Do these individuals have specialist skills or interests in relation to Community Disaster Response Team mandate (First Aid, Shelter, Health, Relief…)?
	Where are these persons located, and do they know what to do in the event of a disaster?
	Who will help the most vulnerable to reach a safe shelter?
	Who will check on the status of the utilities in the community?
	Do the CDRT members know who will carry out the damage and needs assessment for each of the neighborhoods in the community? Do they have the forms?
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Where are these persons located, and do they know what to do in the event of a disaster?	
Who will help the most vulnerable to reach a safe shelter?	
Who will check on the status of the utilities in the community?	
Do the CDRT members know who will carry out the damage and needs assessment for each of the neighborhoods in the community? Do they have the forms?	
Who is trained in the use of the different forms?	
Who is in charge of the overall coordination and assessment if the Team Leader is not available?	
How can the team members be contacted? How can they be contacted if the telephone network breaks down?	
Can each CDR coordinator (Health, Shelter, Relief) contact easily all of his/her team members?	
Where will the team meet for briefings?	
Are all CDR Team members capable of responding if their family or their home is affected?	

This information can be share with the local National Disaster Office and the Red Cross National Society so that points of contact can be established which will allow for better exchange of information in the event of a hazard impact or disaster.

CDRT mobilization checklist (once an alert is sent out):

Who is available for immediate deployment, as well as being on stand-by as a hazard looms closer?	
Does each of the team members know what the others are doing?	
Did each coordinator brief his/her team of volunteers: who will cover which area?	
Evacuation: Are the CDRT members helping to get the vulnerable families to safety?	
Does every member know what he/she must do?	
Does every member know where is the meeting point if (when) communication breaks down?	
Does every member know at what time will the following briefing take place?	
Has all relevant information been sent to the emergency services and municipal authority (if communications have failed, who will send the information?).	

CDRT first response checklist:

Once the 'ALL CLEAR' signal has been given by the Government on the radio, the Team Leader will carry out a first preliminary briefing of the general situation in the community:

How many members of the assessment crew are available? Are all CDR Teams functional?	
What is the extent of the damage to the infrastructure, as well as in the number of injuries?	
Will shelters be required? Will external aid be required?	

You should now be able to:

- ✓ Identify the main threats in your community
- ✓ Anticipate the possible impact of a disaster on the community
- ✓ Localize on a map the more vulnerable areas in the community
- ✓ Ensure that you have done everything necessary to prevent being affected by a disaster
- ✓ List the most vulnerable families in your neighborhood
- ✓ Carry out a family planning exercise with these families
- ✓ Draft the next steps to be carried out with the community disaster committee.
- ✓ Ensure that you have updated your CDRT standard operating procedure (point 2.3) on a regular basis, and that all CDRTs know what to do in the event of an alert and/or a disaster.

You should update your answers to this checklist on a regular basis.

Additional Resources

1) IFRC Vulnerability Capacity Assessment: https://www.ifrc.org/en/what-we-do/disaster-management/preparing-for-disaster/disaster-preparedness-tools1/
2) American red Cross 3 Easy Steps to Prepare for an Emergency: https://www.youtube.com/watch?v=MzaGbHkndts
3) Community Emergency Plan Explained: https://www.youtube.com/watch?v=u7CW32CrGeU
4) IFRC Roadmap to Resilience: https://media.ifrc.org/ifrc/wp-content/uploads/2018/03/1310403-Road-Map-to-Community-Resilience-Final-Version_EN-08.pdf

UNIT 03

CDRT's Roles & Structures

OBJECTIVES

In this unit you will learn about:

CDRT's Roles & Responsibilities

Forming A CDRT Team & Organization

CDRT Structure & Decision Making

CDRT & Response

Steps to take individually and as part of a CDRT before, immediately following, and after a disaster.

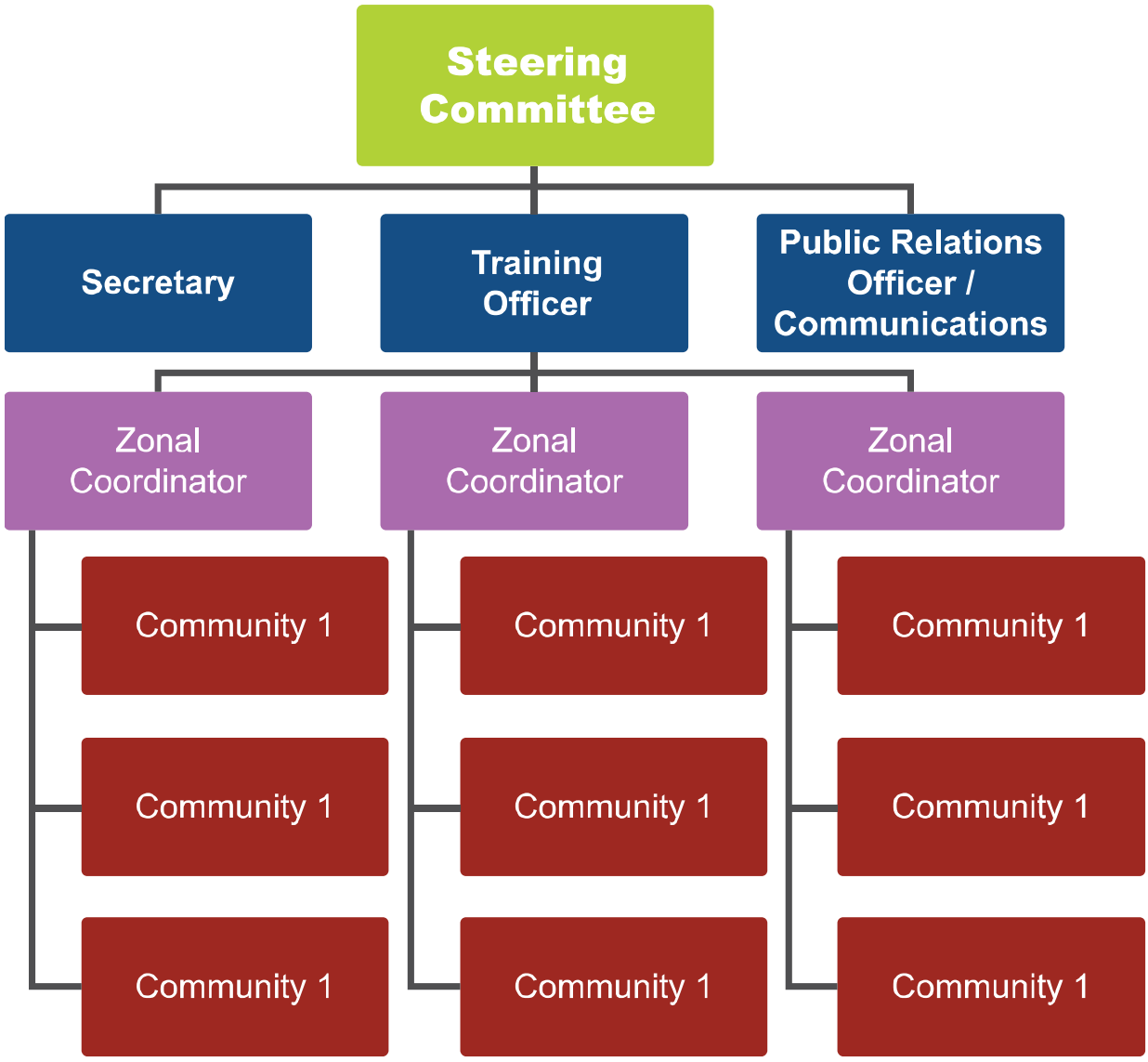
At the end of this unit, you should be able to:

- ✓ Better understand the role of CDRTs
- ✓ Better understand the CDRT structure that exists in their country

3.1
CDRT National Level Structure

CDRTs as well as Community Emergency Response Teams (CERTs), collectively referred to as Community Response Teams, form part of the national response mechanism of a country. It is important to establish a clear chain of command to ensure effective response and coordination of efforts.

The following is an example of the what the governance structure at a national level should look like, however this structure can vary from country to country depending on the laws and policies of the land.



The Steering Committee

The Steering Committee is responsible for making decisions regarding the following:

- Resource mobilization
- Development of an annual budget
- Strategic planning
- Planning of CDRT activities
- Establishment and training of new teams
- Document and record keeping of all CDRT activities.

Members of the Steering Committee should include the National Disaster Organization as the Chair, the National Society as the Co-chair and members of three relevant partnering agencies (fire, medical, police/military, social development ministry and/or NGOs.

The Chair

The Chair, which should be a member of the National Disaster Office has the following responsibilities:

- Leads steering committee and oversees the activities of community response teams.
- Develops and managers relationships and communication across the priority areas.
- Participates in strategic planning.
- Participates in monitoring and evaluation efforts within priority areas.

The Co-Chair

The Co-Chair has oversight of the following:

- Plan and set the overall direction for priority areas.
- Ensure major goals and timelines are achieved.
- Facilitate innovation and problem-solving and encourages relationship building across the network and among stakeholders.
- Monitor progress.

Secretary

The Secretary is responsible for the following activities:

- Effectively organize meetings and ensure that meeting minutes are taken.
- Maintain effective records and administration.
- Uphold legal requirements.
- Ensure sufficient communication and correspondences.

Public Relations Officer (PRO)

The PRO has accountability for the following:

- Prepare and disseminate circulars.
- Document the work/response of community response teams
- Plan publicity campaigns.

Training Officer

The Training Officer should:

- Develop and maintain training materials.
- Ascertain training needs of community response teams.
- Assist in the procurement of materials to support the delivery of training.

Zonal Coordinators

The Zonal Coordinators are responsible for:

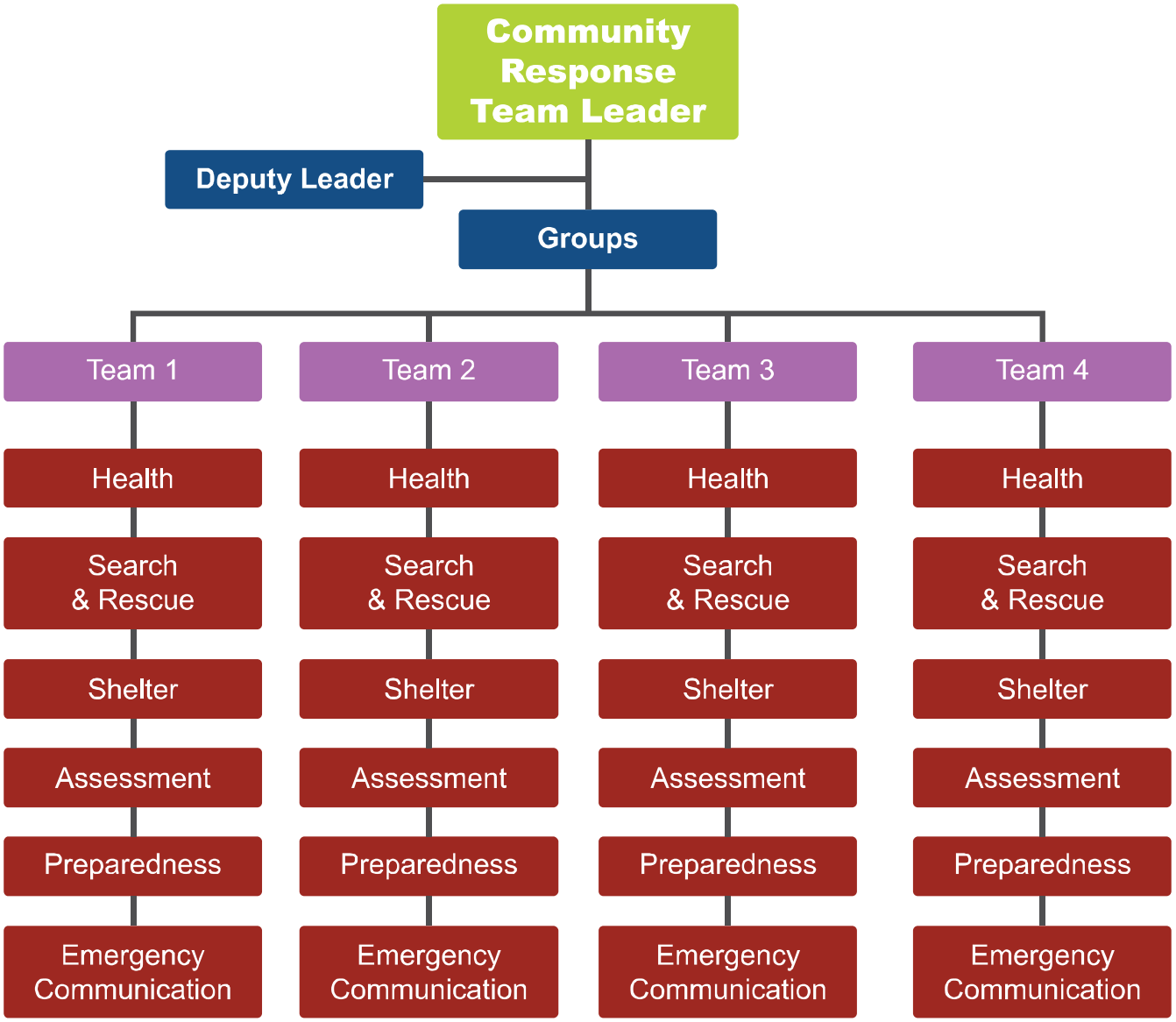
- Maintain an up-to-date schedule of training and refresher courses.
- Ensure adequate supplies and equipment are available for CDRTs.
- Plan, manage, supervise and evaluate all programs under his/her care.
- Keep an updated roster of all CDRT members.

It is important to note that CDRTs can be integrated differently into their country's national response framework. CDRTs can either be asked to assist in times of emergencies by the Red Cross National Society or by the country's National Disaster Office. Explain to CDRTs how they fit into their country's national response framework and their line of reporting.

3.2
CDRT Community Level Structure

Within communities, the CDRT should work with the other established community organizations. The team structure should be flexible, so that it can expand or contract depending on the on-going assessment priorities determined by the Team Leader, and people and resources available. This expansion and contraction helps ensure rescuer safety, doing the greatest good for the greatest number, manageable span of control and accountability of CDRT members.

The following is the recommended structure of CDRTs within a community:



3.3

CDRT Organisation: Key Principles For Community Based Response

The following points about CDRT structure are important:

- Each CDRT must establish an operational structure specific to its community based on its risks and vulnerabilities, in coordination with established community organisations.

- A Community Disaster Response ***Team Leader*** is appointed to direct team activities. For CDRT volunteer activities and training, this person may be appointed by the community.

- The location for coordination should be established by the Team Leader as the central point for command and control of the incident in consultation with the community.

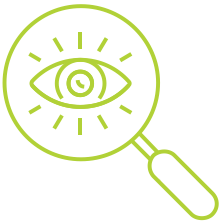
- The Team Leader may appoint members to assist with managing resources, services, and supplies (logistics). Team Leaders may also appoint members to collect and display information (planning) and collect and compile documentation. To maintain span of control, this delegation occurs as the organization expands.

- The CDRT may operate as a single team that performs all activities as required or may be divided into smaller teams (under Operations) of at least three people to achieve specific goals developed (e.g., fire suppression, medical, search and rescue), with a leader for each.

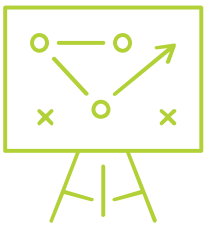
- In all situations, each unit assigned ***must have an identified leader*** to supervise tasks being performed to account for team members, and to report information to his or her designated leader.

Note: CDRT personnel should always be assigned to teams consisting of ***at least three persons***. At least two people will “buddy up” to respond to the immediate needs.

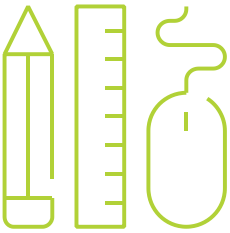
Objectives Of CDRT Teams In Response



Identifies The Scope Of The Incident
(What is the problem?)



Determines An Overall Strategy
(What can we do, and how will we do it?)



Deploys Resources
(Who is going to do what?)

Documents Actions & Results.

3.4
CDRT'S Role In Disaster Risk Reduction

As mentioned in Unit 2, CDRTs play a role in disaster preparedness, before a disaster occurs, through the education and training of communities, the development of disaster plans and evacuation plans and the establishment of early warning systems. It is important to note that CDRTs also play an integral role in each phase of the Disaster Management Cycle which helps with improving the overall resilience of communities.

The actions taken and led by CDRTs are vital to the resilience of a community. Therefore, by being first aid trained, doing community clean up, developing family emergency plans and having and testing a community disaster plan, at least once a year can reduce vulnerabilities and thus enhance capacities towards a better and vibrant community. These actions will enable community members to be more cognizant of their needs and become more involved in the overall process of resilience.

The role of CDRTs in the response phase of the cycle is outlined in subsequent Units as CDRTs are expected to led and/or support with the following:

- Stress management and psychological support
- First aid
- Fire safety
- Communications
- Light search and rescue
- Shelter management

Remember: CDRTs must also have a people's centred approach must therefore ensure the inclusion of vulnerable groups/individuals in the community in all actions taken.

3.5

Rescuer Safety

Remember: Rescuer safety is paramount.

The question, **"Is it safe for the CDRT members to attempt the rescue?"** is very important. The answer to this question is based mainly on the degree of damage to the structure.

When it comes to response and providing assistance, the CDRT organization should proceed in the following way after an incident:

- Following the incident, CDRT members take care of themselves, their families, their homes, and their neighbors.
- If the plan calls for self-activation, CDRT members proceed to the pre-designated staging area with their disaster supplies. Along the way, they make damage assessments that would be helpful for the decision making.
- The Community Disaster Response Team develops the group to ensure effective communication. The CDRT Team Leader must prioritize actions and work load to maintain span of control, maintain accountability, and do the greatest good for the greatest number without placing CDRT members in harm's way.
- Information is collected and assessed (from CDRT members, emergency volunteers, and reports from working teams [e.g., search and rescue]). The CDRT organization should be flexible and evolves based on new information.

Following an incident, information—and, therefore, priorities—may be changing rapidly. Communication between the CDRT Team Leader and response teams ensures that CDRTs do not overextend their resources or supplies.

Effective emergency scene management requires the goals and objectives that are based primarily on the safety of rescue personnel.

Checklist 1: Disaster Response Structure

- ✓ Do you know what the Disaster Response Plan is in your local Government?

  (Who To Contact?)

- ✓ Have you established your own CDRT structure?

  (Who Does What?)

UNIT 04 Community Assessment

OBJECTIVES

In this unit you will learn about:

The Purpose of Assessments

The Type of Assessments

Community Damage Assessment & Needs Analysis.

Conducting An Assessment

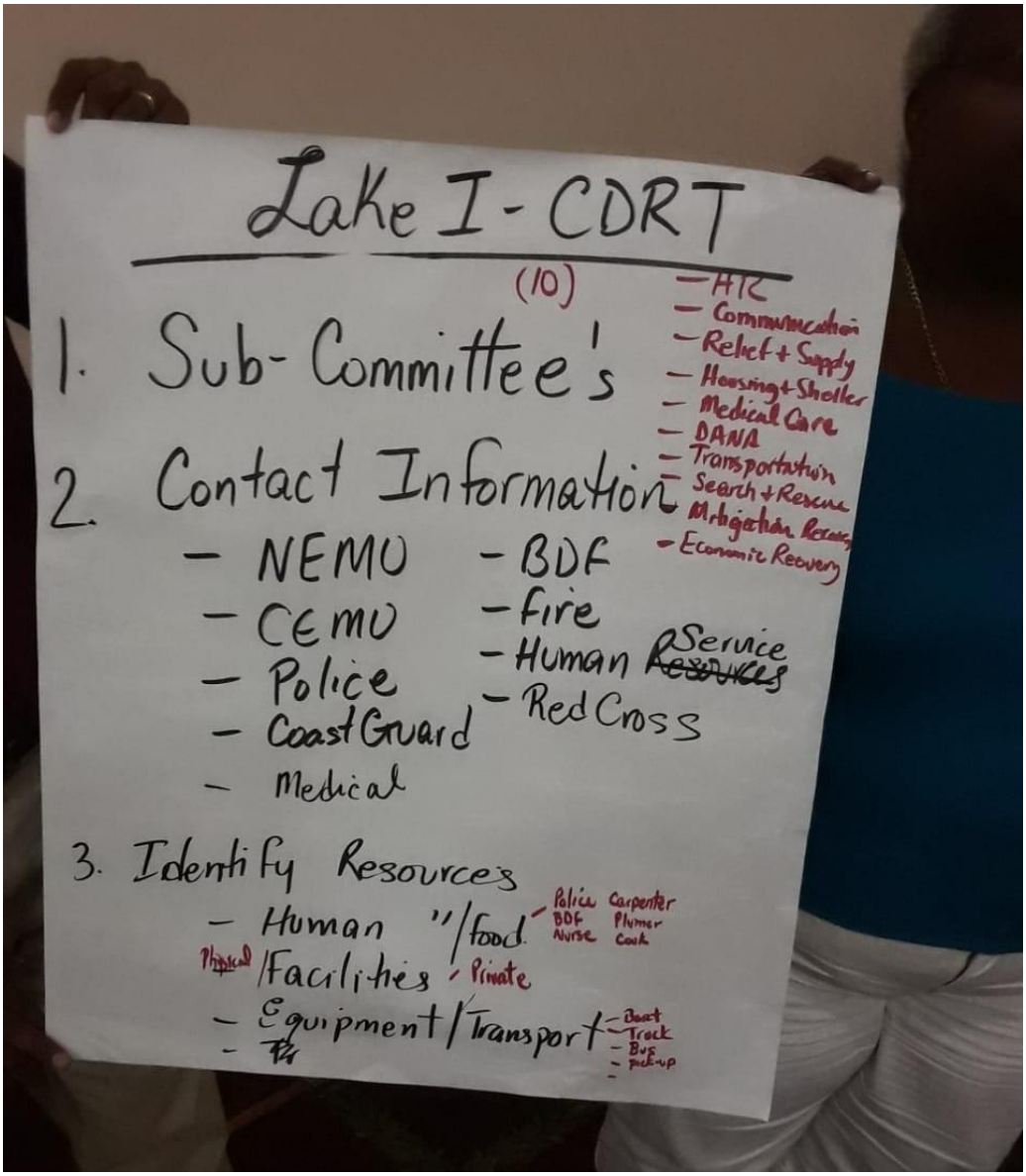
Key Principles and Things to Avoid

At the end of this unit, you should be able to:

- ✓ Understand the purposes of emergency situations and needs assessment
- ✓ Be introduced to the “rolling-assessment approach”
- ✓ Understand the different assessment processes
- ✓ Be able to identify the main components of an emergency situation and needs assessment
- ✓ Describe basic methods and tools for collecting assessment information
- ✓ Identify typical post-disaster needs commonly arising from specific hazard types
- ✓ Be familiar with three assessment reporting formats and one household survey questionnaire
- ✓ Understand how these assessments guide decision-making

4.0
What Is An Assessment?

An assessment include the collection and analysis of data and the reporting of the information collected. It is important to note that assessments can be done before and after a disaster occurs. Data only become useful information when it is meaningful, relevant, understandable and suited for specific purposes.



4.1
Type of Information Collected

As mentioned before, assessments can be conducted before and after a disaster. The following highlights some of the important information that could be collected:

Information collected *before* a disaster:

- What are the risks?
- Who are the vulnerable persons within the community?
- What resources are available? Note that resources can refer to equipment, people and plans.
- Where do people get information?
- What channels of communication is popular in the community?

Information collected *after* a disaster:

- What happened? Gather details of the emergency.
- Who/what was affected and how? This includes the demographics of the affected, number and conditions.
- Who's on the scene? What are they doing? Where are the gaps?
- What is needed? Identify stakeholders or partners that can assist.

4.2
Purpose of Assessments

The purpose of a damage assessment and needs analysis is to assist emergency agencies in decision making. Data only become useful information when meaningful, relevant and understandable at particular times and places, for specific purposes.

- The first reason to conduct an assessment would be to determine if and how the CDRTs can respond or assist the community.
- The information that is collected should be provided to emergency/responding organisations as it can assist with the decision-making process especially as it relates to providing relief to affected persons including any addition needs of the vulnerable population.
- Information collected can assist agencies in determining the extent of an event or a disaster.

4.3
Types of Assessments

- Community Mapping using the Roadmap to Resilience Approach
- Damage Assessment and Needs Analysis (DANA)
- Early Rapid Assessments (0 - 24 hours DANA)
- Ongoing Community Monitoring and Surveillance

What is Community Mapping?

As explained in Unit 2, it is process that is community driven which allows the community to identifying their hazards, vulnerabilities, threats and capacities and apply their knowledge to find their own solutions. This information can be mapped out in a simple community map which can be used for decision-making when a disaster happened. Remember to identify any vulnerable persons in the community.

What is a Damage Assessment and Needs Analysis DANA?

The process of determining the impact of a disaster or events on a society, the needs for immediate, emergency measures to save and sustain the lives of survivors, and the possibilities for expediting recovery and development.

Components of DANA

Needs

What is needed to save lives, alleviate suffering, and mitigate negative economic impacts. The gaps in access to goods and services created by the risks on life, health, basic subsistence and security. It defines the level and type of assistance required for the affected population. It also involves identifying which stakeholders and partners can assist with providing goods and services.

Damage

Concerns the effects of the disaster. It identifies the magnitude and extent of the disaster and its effects on local populations.

What is an Early Rapid Assessment?

It is a DANA that is conducted immediately after a disaster. It provides information on needs, possible courses of action and resource requirements. A more detailed assessment will be carried out as the situation changes.

Rapid Assessment

(0-24 hrs DANA

COMMUNITY RESPONSE

- Has the community been affected?
- Community responds with resources.
- 24 hr DANA
- Report to emergency services

24hr DANA

(Note: this is not a standard form used and could vary from country to country)

DECISIONS & RESPONSE

- Team situation review
- Plan priorities
- Work with authorities if available
- Monitor for changes in situation

Develop Plan of Action and monitoring

FOLLOW-UP REASSESSMENT

- Team situation review
- Report to municipal authorities (and emergency services if necessary)
- Assist in identifying those most in need

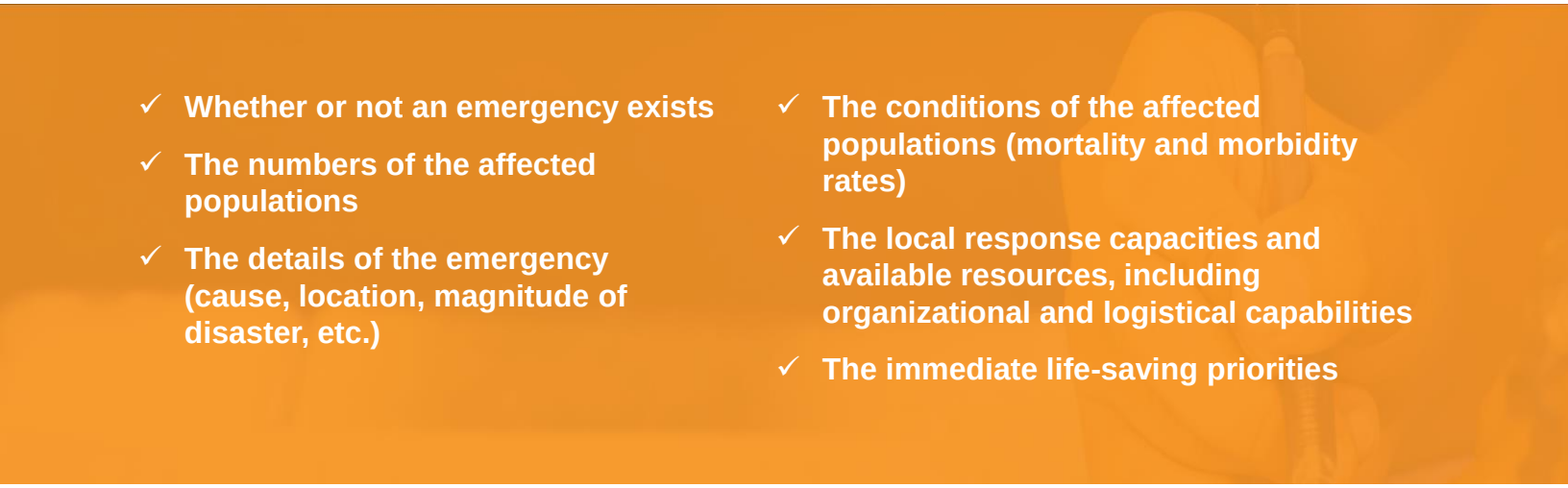
If available use beneficiary identification forms

STAND DOWN ASSESS

4.4
Conducting Assessments After A Disaster

- Early in all emergencies, but especially in rapid onset disasters, there will be great uncertainty about the actual problems. In all kinds of emergencies, decision-makers need to start by developing a picture of where people are, what conditions they are in, what their needs and resources are, and what services are still available to them. At the outset of any emergency, initial assessments are designed to provide basic life-saving information in the shortest possible time.

- A picture of the impact upon people, resources and the environment, for decision making:



- ✓ **Whether or not an emergency exists**
- ✓ **The numbers of the affected populations**
- ✓ **The details of the emergency (cause, location, magnitude of disaster, etc.)**
- ✓ **The conditions of the affected populations (mortality and morbidity rates)**
- ✓ **The local response capacities and available resources, including organizational and logistical capabilities**
- ✓ **The immediate life-saving priorities**

The emergency needs assessment must address critical sectors or technical areas of concern. For example, water sources must be assessed, and nutritional status must be evaluated, as well as the condition of roads, and other infrastructure.

When focusing on these priorities, it is important to have a systematic approach—assessments should be planned to ensure that all relief sectors and all likely affected areas are covered.

Make sketches or, if possible, take photographs. Photos, and hand sketches are extremely useful in communicating to others the reality of the situation.

4.4.1
Importance Of Early Notification: Immediate Assessment

In the first few hours and days of a disaster, decisive action is necessary. In sudden onset disasters, a preliminary “early notification” should be completed by the CDRT as soon as possible after the disaster occurrence—preferably within the first 10 hours after a disaster. This early notification through the Branch, alerts headquarters that a disaster has occurred and approximates the extent and location of the damage.

Early Assessment:

- During the first 24 hours after a disaster
- Elementary information needed to support decision-making
- Normally carried out persons on site
- Include information on the situation:
  - Needs,
  - Local capacities and possible response

Analysis Of Data Reveals

1. Are we overwhelmed/do we need outside help?
2. What are the priorities and priority areas?
3. Inform the authorities to mobilize assistance

The initial needs assessment identifies resources and services for immediate emergency measures to save and sustain the lives and livelihoods of the affected population. Conduct this assessment at the site of a disaster or at the location(s) of displaced population(s).

A rapid response based on this information should help lower excessive death rates and stabilize the nutritional, health, and living conditions among the population at risk.

Purpose of A Detailed Assessment:

- More realistically describe the needs of the most vulnerable
- Forecast sector needs for the next 7-28 days and a projection for 1-3 months
- Define alternatives for reducing immediate risks
- Preparation of the longer-term Plan of Action
- Revision of the Emergency Needs and Priority
- Detail programming
- Gauge local response capacity
- Decide how best to use existing resources for immediate relief
- Seek alternatives to response objectives and intervention

4.4.2

Ongoing Community Monitoring and Surveillance

Community-based surveillance occurs when members of a community actively participate in detecting, reporting, responding to and monitoring events in their community. This is done after the disaster during the recovery process.

It is important to do an assessment during this phase to determine how people are coping and how quickly life is returning to normal or back to what it was before the disaster.

4.5

How To Conduct An Assessment

Develop an outline of how you will conduct the assessment by determining:

- What type of information you need
- The target population (the areas and the number of households or individuals)
- The method
- Consider the resources that are available (human, timing and logistics)

4.5.1
Key Principles and Tips

- Always get consent
- Introduce yourself properly and do not make promises.
- Avoid any biases and encourage affected persons to explain how they view the situation.
- Be respectful at all times.
- Try to identify gaps.
- Try to collect information that is accurate and reliable.
- Be inclusive as different groups and individuals would be affected differently and have different needs.

4.5.2
Reporting

Know who you are reporting to (CDRT Team Leader, National Society or NDO) and how you will get the information to those persons/organisations.

4.6

Working With Counterparts

Working with counterparts is not an option. It is a “must” in order to make things better. A clear and strong correlation exists between the quality of the relations with counterparts and the quality of the results and impacts of our work.

Elements That Must Be Present In A Relationship With Counterparts

1. Respect for differences
2. Reciprocal confidence
3. Firm implication
4. Shared/common responsibility
5. Disposition toward permanent dialogue
6. Constructive criticism
7. Openness and transparency

Counterparts are team members, mayor, local representatives of other agencies, working to assist the affected community.

Definitions of Working with Counterparts:

It is a relationship constructed by different actors united by motivation and a common vision with the purpose of planning executing cooperative activities according to clearly defined and accepted objectives.

You should now be able to:

- ✓ Know when to carry out an assessment,
- ✓ Know when to carry out a 24 hour assessment, and the assessment relates to relief and recovery
- ✓ Organize the CDRT members accordingly
- ✓ Use different forms to ensure all information relevant to a disaster is documented and transmitted to relevant authorities at Red Cross Headquarters and National Disaster Agency.

USE THIS EXERCISE

1. Using Form 1 b. Conduct a damage assessment
2. What is the Planned Response strategy for the scenario
3. What are the required resources

FORM 1:Damage Assessment & Needs Analysis

CDRT Immediate FIELD Assessment Form (B)

First 24 Hours

Type of disaster:

Urban ☐ Peri –Urban ☐ Rural ☐

1. Geographic area:		Approximate number of inhabitants	
2. Community assessed:		Approximate number of inhabitants	
3. CDRT Assessment Team leader name:		4. CDRT Team Leader in the community & contact info:	
5. Date	6. Time		
7. Persons	# Injured	# Dead	# Missing
8. Homes affected:	# Minor Damage	# Moderate Damage	# Destroyed
9.# of Families (provide % is numbers is not possible within the 24 hours)	Currently known: displaced / evacuated	Projected: displaced / evacuated	
10. How are people being sheltered? Shelter / host families / camps / other	Describe shelter situation		

Describe damage and access

11. Status of roads. Best way to access affected area		
12. Conditions/Access of: (as applicable) • Rail • Bridges • Water facilities • Sewage systems • Schools • Health facilities • Electricity • Telephones • Airport • Seaport		Concerns for Hazardous materials ☐ Toxic Spills ☐ Oil Spills ☐ Other:

(OBSERVATION) Describe Livelihood Losses

13. Effect on urban settings: (if applicable)	Commercial Buildings	Business/Factories	Government buildings
14. Brief description of livelihood groups and how they are affected? (Secondary information)			
15. What are the specific physical losses on Agriculture (if applicable)	Crops / gardens	Animals (e.g. livestock, poultry, etc)	Tools
16. What are the specific physical losses on Fishing (if applicable)	Boats	Nets	Tools

17. Answer the following questions

a Is the local government active in the disaster response? YES ☐ NO ☐ Don't Know ☐

b. Is the community responding to the disaster? YES ☐ NO ☐ Don't Know ☐

c. Are NGO groups responding in the disaster area? YES ☐ NO ☐ Don't Know ☐ Who?_____

d. Is there any sign that affected area has access to insurance companies? YES ☐ NO ☐ Don't Know ☐

17. Expected needs:

Minor damage: Living in the building is fine, but needs repair. **Moderate damage:** Serious damage to the building, but will be livable after repairs are made. **Destroyed:** Obviously destroyed and not repairable

Note: If require, explain location sketch a map

UNIT 05

Stress Management & Psychosocial Support

OBJECTIVES
In this unit you will learn about:

Stress and the Long-Term Consequences

Coping Mechanisms

Psychosocial Support

The psychological impact of a disaster on rescuers and victims, and how to provide psychosocial support.

Caring for Yourself, Your team members, and Victims

Steps to take individually and as part of a CDRT before, immediately following, and after a disaster.

At the end of this unit, you should be able to:

- ✓ Identify signs of stress in disaster victims
- ✓ Have in mind the action to take when faced with traumatized victims
- ✓ Know when you are feeling the impact of the disaster response activities
- ✓ Explain to your team members that you have to take some time off;
- ✓ Identify and know how you can deal with your own stress.

5.1

Psychological & Social Support

What is psychological and social support during disasters?

Disasters, conflicts, wars and epidemics are more frequent in today's world and therefore represent a serious threat to the health and well being of affected persons.

The Unit introduces participants to the kinds of the trauma and stress persons endure during disasters; why psychosocial support is necessary; and explains how the work of volunteers serves to alleviate emotional suffering. This encourages community resilience which supports persons to return to and rebuild their lives.

A crisis can be defined as any sudden interruption of the normal course of events in life of an individual or a society. Crisis events range from individual incidents to massive disasters and many include hostage taking, disease outbreaks, hurricanes and floods.

Such events can have social and psychological consequences that may reduce the person's capacity to continue normal life. It is natural in these situations to feel a sense of loss that can be:

- Loss Of Personal Relations And Possessions
- Loss Of Income Generation
- Loss Of Social Cohesion
- Loss Of Dignity, Security, Trust
- Loss Of Self-esteem
- Loss Of Hope

Purpose of the Unit

CDRT members should prepare themselves for their role during and following a disaster by learning about the possible impact of disaster on them and others, emotionally and physically. This knowledge will help CDRT members understand and manage their reactions to the event and to work better with others.

Psychosocial refers to the dynamic relationship between the psychological and social dimensions of a person, and how one influences the other. And psychosocial support refers to a process of facilitating resilience within individuals, families and communities enabling them to bounce back from the impact of a crisis.

It is a process that helps the community to deal with such events in the future by promoting the restoration of social cohesion and infrastructure. It helps people recover after a crisis has disrupted their lives.

Psychosocial support in an emergency:

- Provides immediate help
- Reduces the risk of normal reactions becoming serious and long term
- Can help affected persons to be better able to cope with the physical and material needs that may arise during a disaster situation

The people offering psychological support should at least, possess good inter-personal and empathy skills, and have the disposition and the interest in providing help wherever necessary.

5.2

What Is Stress?

In order to provide psychological support, it is necessary to understand what stress is and the different types of it.

Stress is a natural physical and mental reaction to life experiences; it is our body's response to pressure. Many different situations or life events can cause stress. It is often triggered when we experience something new, unexpected or that threatens our sense of self, or when we feel we have little control over a situation.

Stress can be positive and activate a person's capacity to mobilize internal resources to react promptly and adequately to a sudden or new situation. However, if the person stays for too in a state of stress it can overload the body's resources, causing an unbalance and developing into negative forms of stress.

5.2.1

Types of Stress

Day to Day Challenges or Stressors

Encompass both predictable challenges, such as caring for a child or commuting between work and home, as well as unexpected, such as an unexpected work deadline or a traffic jam.

Cumulative Stress

Is a common experience for people who work in chronically stressful situations. It results from an accumulation of various stress factors such as heavy workload, poor communication, multiple frustrations, coping with situations in which you feel powerless, and the inability to rest or relax.

Burn Out

Is a state of physical and mental exhaustion caused by excessive and prolonged stress to the point where a person feel completely overwhelmed. Unstable environments and prolonged feelings of lack of support and recognition, lack of control and poor self-care routines can lead to burnout.

Critical Incident Stress

Is an emotional reaction to a catastrophic event such as a mass casualty incident or the death of a patient or co-worker or the occurrence of a natural disaster. Often such events negatively affect the well-being of workers responding to emergency events and or disasters.

5.2.2
Stress Reactions

Physical

Increased heart rate and respiration

Increased blood pressure

Upset stomach, nausea, diarrhea

Sweating or chills

Tremors or muscle twitching

Muffled hearing

Feeling uncoordinated

Headaches

Sore or aching muscles

Fatigue that does not improve with sleep

Behavioral

Changing in activity levels

Decrease efficiency and effectiveness

Difficult communicating

Increased sense of humor/gallows humor

Irritability, outbursts of anger, frequent arguments

Inability to rest, relax, or let down

Change in eating habits

Change in sleep patterns

Change in job performance

Periods of crying

Increase use of tobacco, alcohol, drugs, sugar or caffeine

Avoidance of activities or places that trigger memories

Accident prone

Cognitive (mental)

- Memory problems/forgetfulness
- Disorientation
- Confusion
- Slowness in thinking, analyzing, or comprehending
- Difficulty calculating, setting priorities or making decisions
- Difficulty concentrating
- Limited attention spam
- Loss of objectivity
- Inability to stop thinking about the disaster or incident

Psychological or Emotional

- Feeling heroic, euphoric or invulnerable
- Anxiety and fear
- Irritability or anger
- Restlessness
- Worry about safety of self or others
- Sadness, moodiness, grief or depression
- Guilty or “survivor guilty”
- Denial
- Feeling misunderstood or unappreciated

Interpersonal (social)

- Withdrawing or isolating from people
- Intolerance of group process

Spiritual

- Life seems pointless (hopelessness)

5.2.3
Long-Term Symptoms of Stress

- Fatigue
- Irritability, which can be extreme
- Headaches
- Rapid, disorganized thoughts
- Difficult sleeping
- Digestive problems
- Difficulty concentrating, or an inability to do so.

Long term stress can cause or exacerbate many serious health problems, including mental health issues, such as depression, anxiety and personality disorders.

Reduce stress:
There are simple and effective ways to manage the stress before it turns into chronic. You can take the following preventive steps in your everyday life:

5.2.4
Healthy Coping Strategies

Get Enough Sleep

Balance work, play and rest

Exercise

Connect with others

Eat a balanced Diet

Allow yourself to receive as well as to give. Remember that your identity is broader than that of a helper

5.3
Why Use CDRTS & Volunteers For PSS?

- Volunteers are often a part of the local community.
- Local volunteers are often familiar with the culture.
- Volunteers often have easier access to and the confidence of the affected population as well as local knowledge.
- Volunteers often intervene in difficult situations in an environment where they themselves are part of that community.

5.4
CDRTs and Stress

Remember, that responders and volunteers can suffer from negative forms of stress. During an emergency response you may see and hear things that will be extremely unpleasant, so be careful of the following:

Vicarious Trauma

This is the emotional residue of exposure that helpers have from working with people as they are hearing their trauma stories and become witnesses to the pain, fear, and terror that survivors have endured. It can be an “occupational hazard” for helpers.

Over-identify with the Survivors

Do not take on the survivors’ feelings as your own. Taking ownership of others’ problems will compound your stress and affect the CDRT’s overall effectiveness.

Be alert to signs of distress due to the emergency event in yourself, as well as in the disaster victims, so that you can take steps to alleviate stress.

5.5
Preparing for Psychological Stressful Situation

There are steps that CDRT team leaders can take to promote team well-being before, during, and after an incident:

BEFORE:

- Provide pre-disaster stress management training and PFA to all CDRT personal.
- Brief CDRT personnel before the effort begins on what they can expect to see and what they can expect in terms of emotional response in the survivors and themselves.
- Emphasize that the CDRT is a team. Sharing the workload and emotional load can help defuse pent-up emotions.

DURING:

- Encourage rescuers to rest and re-group so that they can avoid becoming overtired.
- Direct rescuers to take breaks away from the incident area, to get relief from the stressors of the effort.
- Encourage rescuers to eat properly and maintain fluid intake throughout the operation. Explain that they should drink water or other electrolyte-replacing fluids and avoid drinks with caffeine or refined sugar.
- Rotate teams for breaks or new duties (i.e., from high-stress to low-stress jobs). Team members can talk with each other about their experiences. This is very important for their psychological health.
- Phase out workers gradually. Gradually phase them from high- to low-stress areas of the incident.

5.5.1
Organising Debriefings

CDRT leaders may invite a local government counselors or a professional trained in Critical Incident Stress Management (CISM) to conduct a debriefing (CISD) to help emergency services personnel and volunteers cope with a traumatic event.

In some cases, it might be necessary to seek help from mental health professionals.

People should be encouraged to attend debriefings, but participation should be voluntary. To schedule and manage a debriefing, you should contact your community counselors, medical mental health agency.

5.6
Working with Trauma Survivors

You should expect that survivors will show psychological effects from the disaster—and some of the psychological anger will be directed toward you.

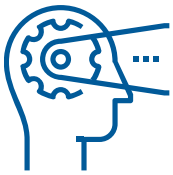
A traumatic crisis is an event that people experience or witness:

- Actual or potential death or injury to self or others.
- Serious injury.
- Destruction of their homes, neighborhood, or valued possessions.
- Loss of contact with family members or close friends.

You should not take the survivors' surface attitudes into heart.

Rescuers may expect to see a range of responses that will vary from person to person, but the responses they see will be part of the psychological impact of the event—and probably will not relate to anything that the CDRTs have or have not done.

Traumatic Stress May Affect:



Cognitive Functioning

Those who have suffered traumatic stress many act irrationally, have difficulty making decisions; or may act in ways that are out of character or them normally. They may have difficulty sharing or retrieving memories.

Physical Health

Traumatic stress can cause a range of physical symptoms—from exhaustion to more serious health problems.

Interpersonal Relationships

Those who survive traumatic stress may undergo temporary or long-term personality changes that make interpersonal relationships difficult.

Victim Response:

The strength and type of personal reaction vary because of:

- **The victim's prior experience** with the same or a similar event. The emotional effect of multiple events can be cumulative, leading to greater stress reactions.

- **The intensity of the disruption** in the survivors' lives.
The more the survivors' lives are disrupted, the greater their psychological and physiological reactions may become.

- **The meaning of the event to the individual.** The more catastrophic the victim perceives the event to be to him or her personally, the more intense will be his or her stress reaction.

- **The emotional well-being of the individual** and the resources (especially social) that he or she must cope. People who have had other recent traumas may not cope well with additional stressors.

- **The length of time that has elapsed** between the event's occurrence and the present. The reality of the event takes time to "sink in."

Provide Support By:

- **Listening Without Judgement-** Listen to them talk about their feelings and their physical needs. Victims often need to talk about what they've been through—and they want someone to listen to them. However, never pressure people to talk about what happened, and always respect the person if they don't want to talk about.

- Communicate in a clear calm manner – Be alert of the information the person is given.

- **Empathize – Show** by your responses that you hear their concerns. Victims want to know that someone is there for them.

- Offer Information- Inform victims of what can be expected to happen in the next hours or days. Let victims know that common reactions to extreme stress can lead to anxiety, fear, intrusive images and sleep disorders and convey that these reactions can occur to but not everyone has to suffer from them.

- **Help survivors connect to natural support systems**, such as family, friends, or clergy.

- Refer to psychological specialists – be able to recognize and refer people who might need mental services.

5.7
Providing Psychosocial Support

The goal of on-scene psychological intervention on the part of CDRT members should be to stabilize the incident scene by stabilizing individuals. Do this in the following ways:

- **Assess The Survivors For Injury and Shock**

Address any medical needs first. Observe them to determine their level of responsiveness and whether they pose a danger to themselves or to others.

- **Get Uninjured People Involved In Helping**

Focused activity helps to move people beyond shock, so give them constructive jobs to do, such as running for supplies. This strategy is especially effective for survivors who are being disruptive.

5.7.1

Attitudes And Phrases To Avoid

Survivors that show evidence of being suicidal, psychotic, or unable to care for themselves should be referred to mental health professionals for support. (This will be infrequent in most groups of survivors.)

When providing support, CDRT members should avoid saying the following phrases. On the surface, these phrases are meant to comfort the survivors, but they do not show an understanding of the person's feelings.

- **"I understand."** In most situations we cannot understand unless we have had the same experience.

- **"Don't feel bad."** The survivor has a right to feel bad and will need time to feel differently.

- **"You're strong/You'll get through this."** Many survivors do not feel strong and question if they will recover from the loss.

- **"Don't cry."** It is ok to cry.

- **"It's God's will."** Giving religious meaning to an event to a person you do not know may insult or anger the person.

- **"It could be worse" or "At least you still have …"** It is up to the individual to decide whether things could be worse.

These types of responses could elicit a strong ***negative*** response or distance the survivor from you. It is ok to apologize if the survivor reacts negatively to something that you said.

5.7.2
Attributes That A CDRT Offering Psychological Support Must Possess

Accessible

A Good Listener

Empathy

Patience

Non-Judgmental

Sympathy

Friendly

Confidentiality

5.7.3
Dealing With Death

One unpleasant task that CDRT members may face is managing the family members at the scene of the death of a loved one. The guidelines below will help you deal with this situation:

- **Cover the body; treat it with respect.** Wrap mutilated bodies tightly.
- **Have one family member look** at the body and decide if the rest of the family should see it.
- **Allow family members to hold or spend time with the deceased.** Stay close by, but don't watch—try to distance yourself emotionally somewhat.
- **Let the family grieve.** Don't try to comfort them out of a need to alleviate your own discomfort.

In some cases, the family may not know of the death of their loved one, and CDRT members may be called upon to tell them. Suggest that in this situation, CDRT members:

- **Separate the family members** from others in a quiet, private place.
- **Have the person(s) sit down,** if possible.
- **Make eye contact** and use a calm, kind voice.
- Use the following words to **tell the family members** about the death: "I'm sorry, but your family member has died. I am so sorry."

You should now be able to:

- ✓ Identify signs of stress in disaster victims
- ✓ Have in mind the actions to take when faced with traumatized victims
- ✓ Know when you are feeling the impact of the disaster response activities
- ✓ Explain to your team members that you have to take some time off;
- ✓ Identify and know how you can deal with your own stress.

Additional Resources

1) eCBHFA Volunteer Manual
   https://drive.google.com/file/d/10bZ2FGWbTaqEOaS1TJktaMEq9jtZAJaY/view

2) IFRC Psychosocial Centre: https://pscentre.org/

UNIT 06 | Health In Emergencies

IFRC

CaDRiM Reference Centre
Caribbean Disaster Risk Management

DOMINICA RED CROSS

USAID
FROM THE AMERICAN PEOPLE

OBJECTIVES
In this unit you will learn about:

The Effects of Disasters on Health and Vulnerable Groups.

Identify Common Diseases in Emergencies

Understand CDRTs Role in Risk Assessment

Preventative Measures For Communicable Diseases

Life-threatening Conditions
How to recognize and treat an airway obstruction, bleeding and shock.

Triage
Principles of triage and how to conduct triage evaluations.

At the end of this unit, you should be able to:

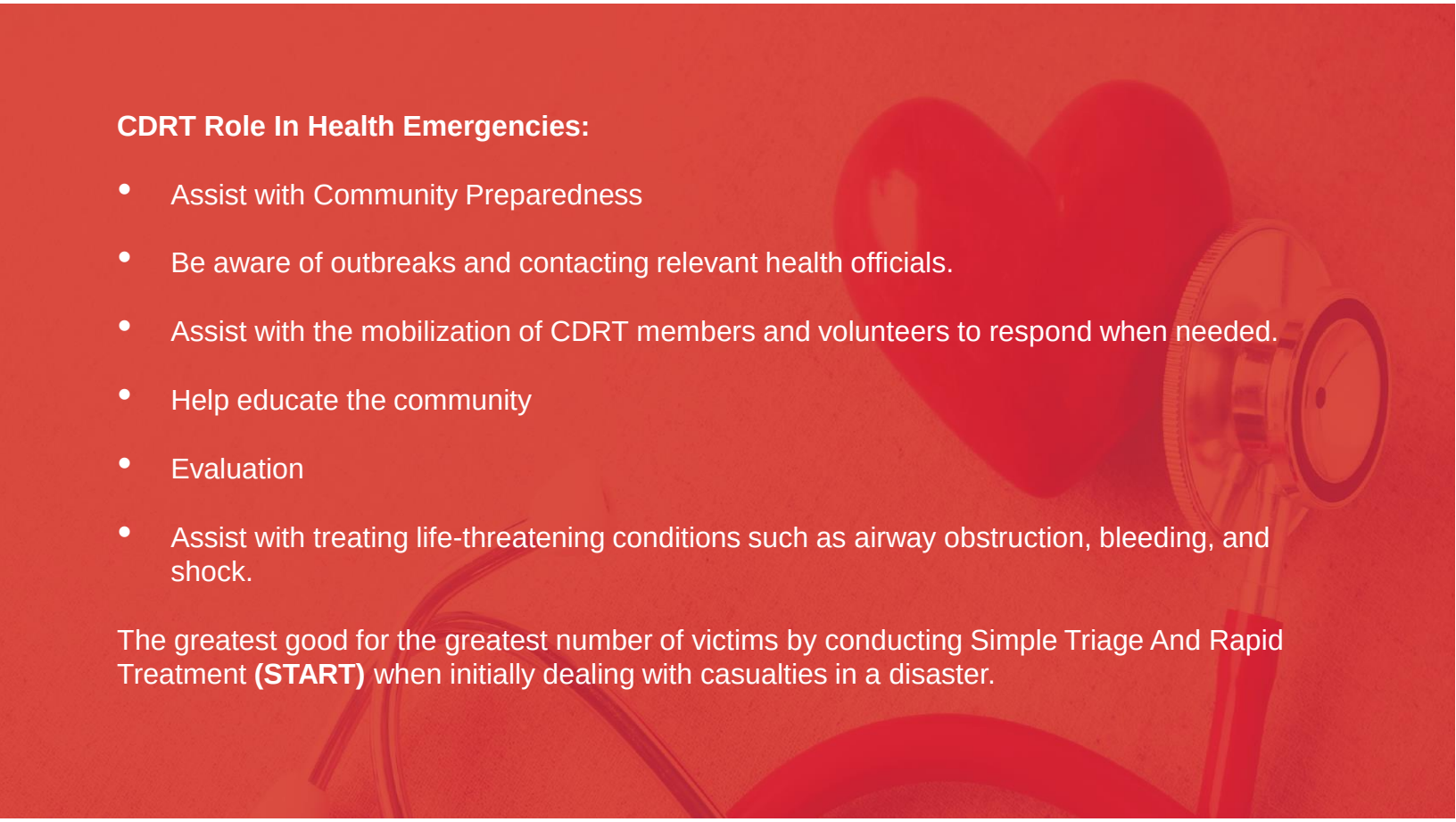
- ✓ Understand disaster management terms.
- ✓ Learn about the different hazards.
- ✓ Understand how disasters can affect communities.
- ✓ Prepare against disasters and adapt for climate change.

6.1
Understanding Health In Emergencies

In recent times we have seen an increase in biological hazards, a prime example of which is the COVID-19 pandemic. CDRTs must therefore understand and prepare for certain epidemic outbreaks in their community.

There is another aspect of health in emergencies, which is the administering of first aid to victims of a disaster. In a disaster, there will be more victims than rescuers and that immediate help from first responders will not be available.

Given the overwhelming nature of disasters, the CDRT members' training in basic first aid can play a critical role in disaster response. CDRT's must be able to function quickly and efficiently to save lives.



CDRT Role In Health Emergencies:

- Assist with Community Preparedness
- Be aware of outbreaks and contacting relevant health officials.
- Assist with the mobilization of CDRT members and volunteers to respond when needed.
- Help educate the community
- Evaluation
- Assist with treating life-threatening conditions such as airway obstruction, bleeding, and shock.

The greatest good for the greatest number of victims by conducting Simple Triage And Rapid Treatment **(START)** when initially dealing with casualties in a disaster.

Risk Factors

The following risk factors can exacerbate effects on health:

- Poor Access To Safe Water & Adequate Food
- Overcrowding
- Underlying Conditions
- Poor Sanitation & Hygiene Practices
- Seasonal Changes
- Lack Of Access To Treatment
- Low Levels Of Immunity
- Displaced Populations

Impact On Vulnerable Groups

Disasters can negatively impact the physical and mental health of persons in many ways and persons within vulnerable groups can be more negatively impacted than others. These persons should be identified when developing community plans and include:

- Pregnant And Lactating Women
- Children Under The Age Of Five
- Older Persons
- Persons With Disabilities
- Persons Living With Chronic Diseases Such As Diabetes & HIV/AIDS
- Minority Ethnic Groups

6.1.2
Diseases In Emergencies

Disasters can negatively impact persons with noncommunicable diseases and result in the spread of communicable diseases.

6.1.3
What are Noncommunicable Diseases (NCDs)?

NCDs are health conditions which cannot be spread from one person to another, they usually require ongoing treatment. Common types of NCDs include cardiovascular diseases, diabetes, cancer and chronic lung diseases.

According to the WHO, in an adult population of 10,000 people, there are likely to be:

- 1500 – 3000 people with hypertension
- 500 – 2000 people with diabetes
- 3 - 8 acute heart attacks over a normal 90 day period
- 4 – 16 acute strokes over a normal 90 day period.

Source: Noncommunicable Diseases in Emergencies. World Health Organisation.

Disasters can lead to the deterioration in health of persons with an NCD as a result of:

- Direct physical injury.
- Loss of access to prescribed medication
- Lack of water and food can add to physical and psychological stress
- Lack of access to health services

6.1.4
How Should Persons with Noncommunicable Diseases Prepare?

- Include a backup supply of prescribed medication in your disaster kit.
- Store appropriate non-perishable foods in your disaster kit.
- Include instructions for emergency care in your family emergency plan.

CDRTs can include persons with noncommunicable diseases in the registry of vulnerable persons in the community.

6.1.5
What are Communicable Diseases?

Communicable diseases can spread from one person to another or from an animal to a person either directly or indirectly.

Human to Human

The following are ways in which a disease can be transferred from one person to the next:

Direct	Indirect
- Sneezing - Coughing - Touching - Mother to unborn baby	- Touching something that contains the pathogens. - Drinking from the same cup after someone with an infectious disease

Animal to Human

The following are ways in which a disease can be transferred from an animal to a human:

Direct	Indirect
- Eating infected animals - Being bitten by bugs - Getting scratched - Getting stung	- Petting animals then touching your eyes, nose or mouth - Drinking water after an infected animal

Plant to Animal

Diseases can spread from plants to animals through two ways, either by eating unwashed fruits and vegetables or by touching contaminated fruits then touching your eyes or mouth with your fingers.

There are four types of communicable diseases:

Air-borne

This is when germs spread through the air for example H1N1, measles and tuberculosis.

Water-borne

Persons can become sick by ingesting or touching contaminated water, such as gastroenteritis and cholera. Infection with water-borne diseases most often result in diarrhea. The most severe threat posed by diarrhea is dehydration. Diarrheal diseases can be spread easily in overcrowded conditions with poor access to sanitation and safe water and poor hygiene.

Vector-borne

A vector is a disease carrying agent, usually an insect or animal and can be a major cause of sickness and death in many disaster situations. The main vectors for disease transmission include mosquitos, ticks, fleas and rats.

Direct contact

These types of diseases can be transmitted when an infected person has direct bodily contact with an uninfected person. Contact diseases can also be spread through the contact with an infected person's environment or personal items.

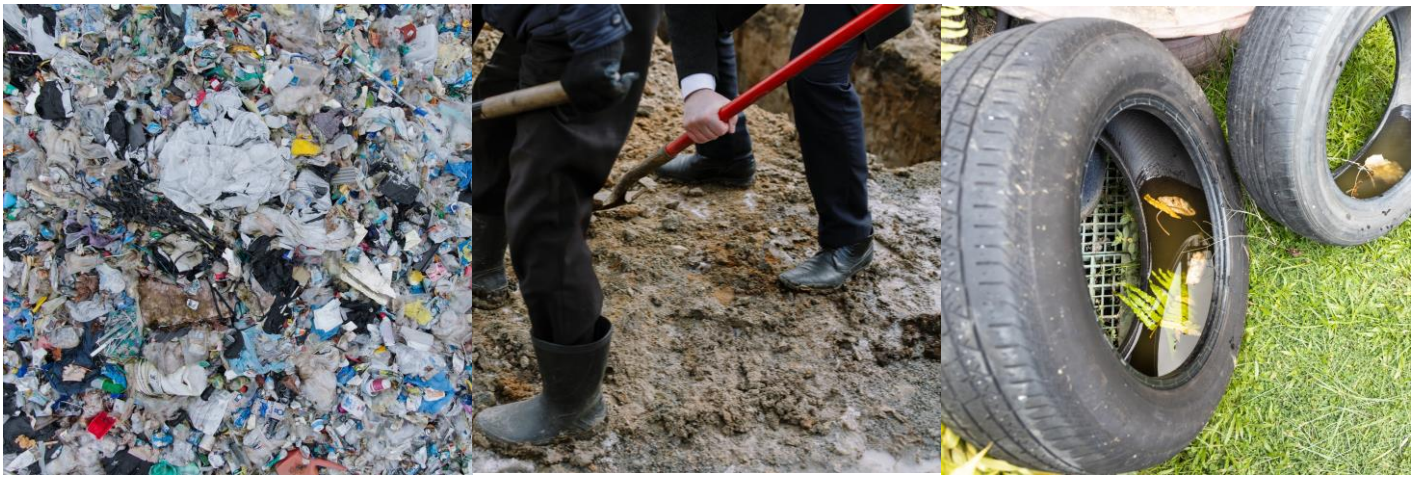
6.2
Preventative Measures

Proper Sanitation Measures

Compromised sanitation facilities and lack of clean water supplies create ideal conditions that encourage the spread of **water-bourne** and **vector-bourne** communicable diseases and therefore ensuring proper sanitation measures is crucial after a disaster.

Proper sanitation measures include:

- Safe excreta disposal
- Proper solid waste collection and disposal
- Proper burial of corpses and destruction of animal carcasses
- Proper washing of fruits and vegetables before eating
- Do not eat raw or undercooked meat or eggs
- Eliminate/reduce standing water where mosquitos are likely to breed.



Personal Hygiene Measures

Ensuring your own personal hygiene is another major way to reduce the risk factors that results in disease. The following are some measures that you can take:

- Wash your hands thoroughly and regularly using soap and water or an alcohol-based sanitizer.
- Cover your mouth with a tissue when you sneeze or cough.
- Wear a mask
- Ensure proper daily dental hygiene
- Assist with Community Preparedness
- Be aware of outbreaks and contacting relevant health officials.
- Assist with the mobilization of CDRT members and volunteers to respond when needed.
- Help educate the community

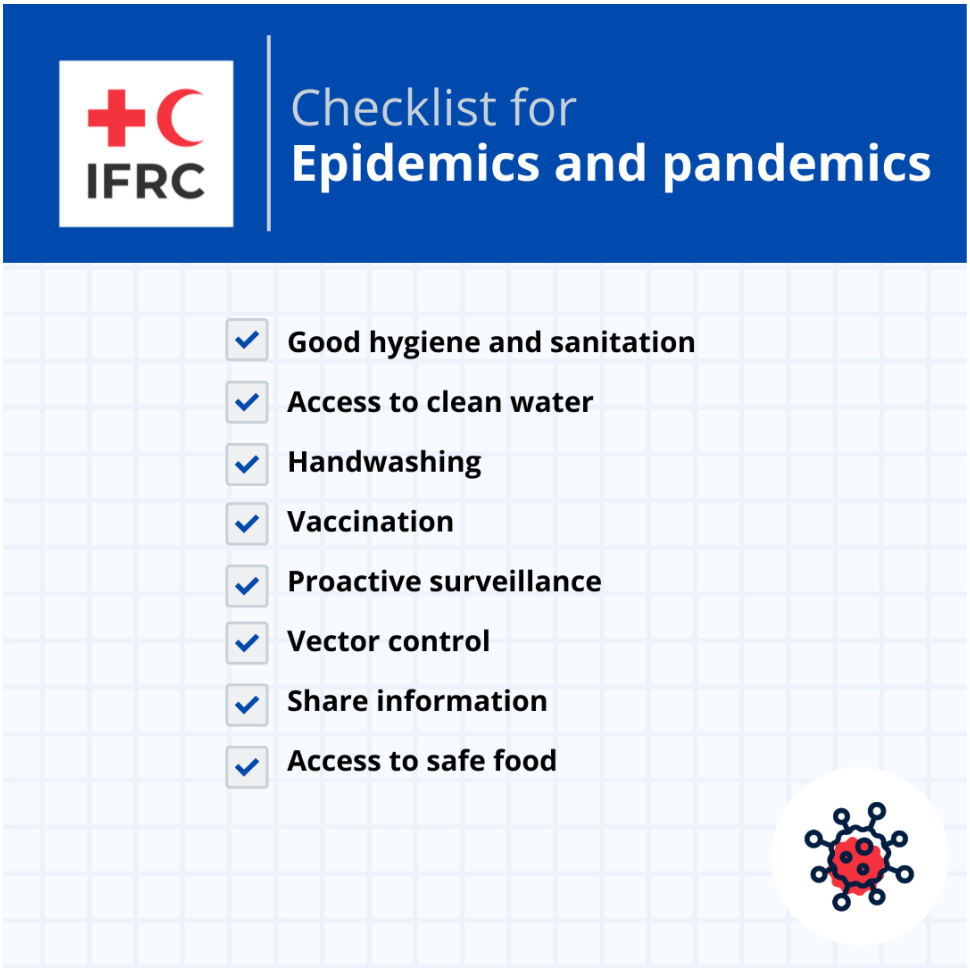
6.3
Dealing With An Epidemic

Before A Disaster

Community Preparedness
It is important for community members to prepare for certain epidemic outbreaks in their community.

CDRTs should help with educating or increasing the awareness of community members on disaster related health impacts and keeping safe from a biological hazard.

CDRT can also help with preparedness by including ways to deal with epidemic outbreaks within the community and household levels.



During A Disaster

Assess risk for potential health threats.
Adequate, sufficient and reliable information at the appropriate time can help decision makers to make informed decisions.

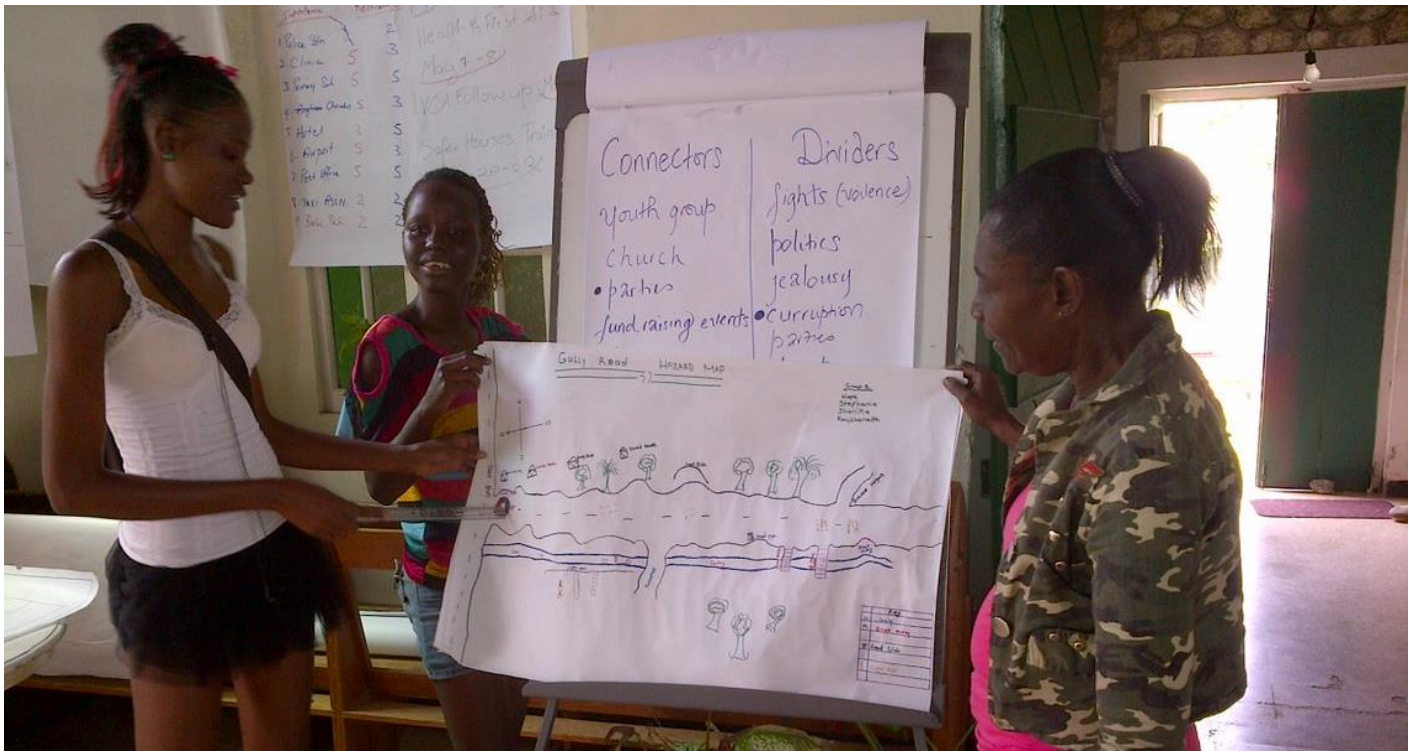
When assessing the situation look for the following:

Who?
Who are the most affected?

What?
What are some of the health concerns?

Where?
Where are the most affected persons located?

If possible, draw a simple map to mark the location of cases in order to help identify a pattern.



After A Disaster

Community-based Surveillance

Community-based surveillance occurs when members of a community actively participate in detecting, reporting, responding to and monitoring health events in their community.

As mentioned previously, the health care system may become overwhelmed after a disaster so CDRTs might be called to assist local health authorities in collecting data about a specific disease and its spread.

Even when CDRTs do not have a formal surveillance role, it is important to report symptoms or new cases to field officers.

Proposed Activity: There's an epidemic in your community. Work as a group to discuss how CDRTs can be mobilized to conduct a risk assessment and identify stakeholders that CDRTs should work with. Also identify ways to communicate important information back to the community.

This Unit also aims at helping CDRTs learn to function quickly and efficiently to save lives. This part of the Unit will help you understand life threatening conditions and learn how to treat with these conditions

You should now be able to:

- ✓ Conduct A Risk Assessment
- ✓ Assist With The Surveillance of Diseases After A Disaster
- ✓ Act & Use Community Messaging

Additional Resources

1) 1) Epidemic Control for Volunteers: http://ifrcgo.org/ecv-toolkit/

6.4
Treating Life-Threatening Conditions

There are three causes of death from trauma:

Cause 1:

Death within minutes as a result of overwhelming and irreversible damage to vital organs

Cause 2:

Death within several hours as a result of excessive bleeding

Cause 3:

Death in several days or weeks as a result of infection or multiple-system failure (i.e., complications from the injury)

Experts agree that over 40 percent of disaster victims in the second and third phases of death could be saved by providing simple medical care.

In a medical emergency, airway obstruction, bleeding, and shock are life-threatening conditions (“killers”) that can result in death if not treated immediately.

The priority of medical operations is to attend to those potential killers by*:*

A. Opening the airway and restoring breathing.

B. Controlling excessive bleeding.

C. Treating for shock by insuring adequate circulation.

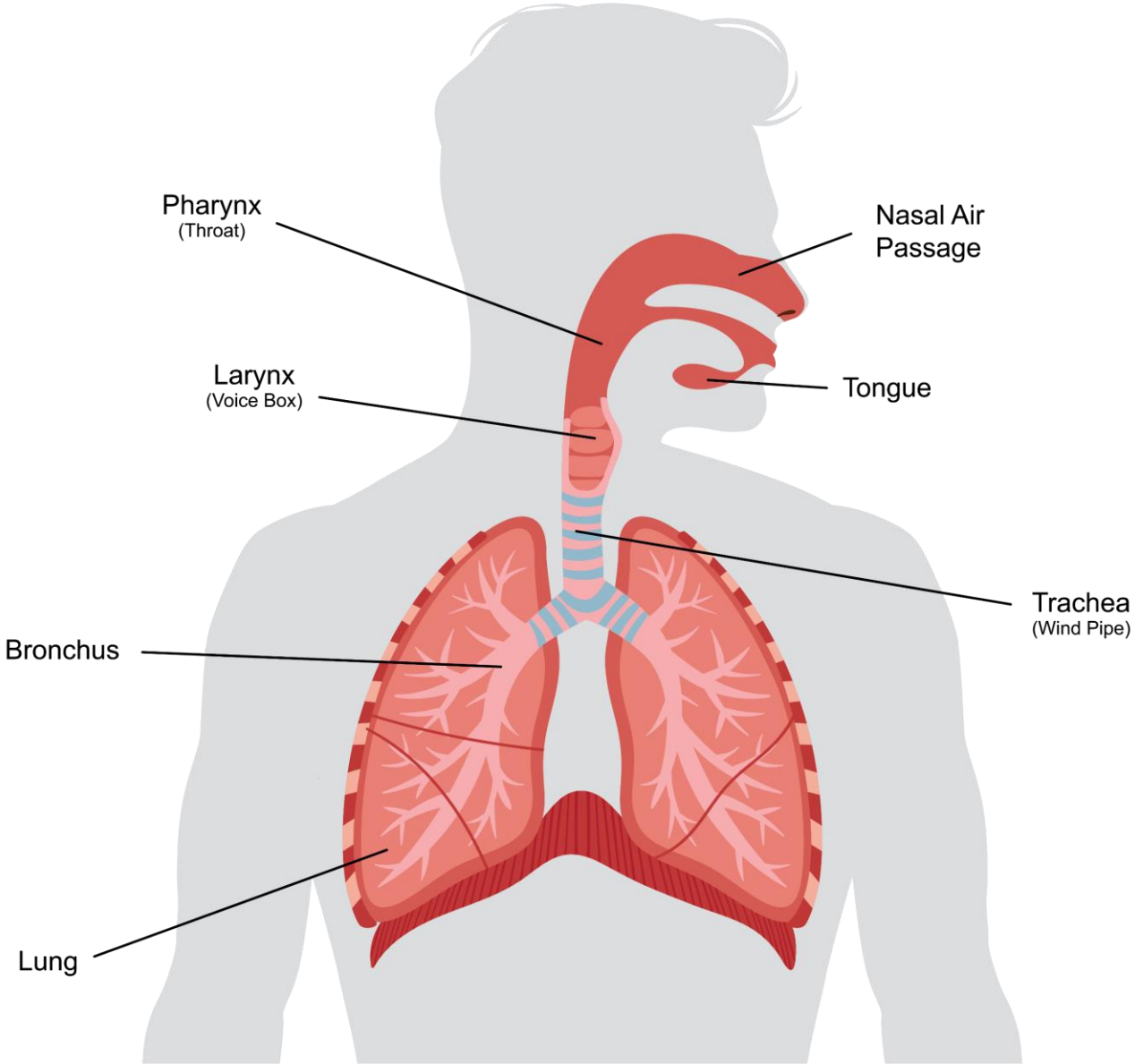
This section will train you to recognize the “killers” by recognizing their symptoms and their effects on the body.

Always Wear Safety Equipment

Helmet, goggles, gloves, mask, and boots. A timesaving technique is to wear latex gloves under your work gloves. Then, when you find a victim, you can remove your work gloves and are ready to work with the victim.

6.4.1

Opening The Airways



Components Of The Respiratory System:, Airways, Lungs & Muscles.

As indicated the most common airway obstruction is the tongue. In an unconscious or semiconscious victim, especially one positioned on his or her back, the tongue—which is a muscle—may relax and block the airway.

A victim with a suspected airway obstruction must be checked immediately for breathing and, if necessary, the airway must be opened. When the victim is not breathing, use the Head-Tilt/Chin-Lift method of opening the airway.

The Head-Tilt/Chin-Lift method involves following the six steps shown in the table below.

STEP	ACTION
1	At an arm's distance, shake the victim by touching the shoulder and shout, "Can you hear me?"
2	If the victim does not or cannot respond, place one hand on the forehead.
3	Place two fingers of the other hand under the chin and tilt the jaw upward while tilting the head back slightly.
4	Look for chest rise.
5	Listen for air exchange.
6	Feel for abdominal movement.

6.4.2
Controlling Bleeding

Uncontrolled bleeding initially causes weakness. If bleeding is not controlled within a short period, the victim will go into shock (described in the next section), and finally die. The average adult has about 5 liters of blood. Because the loss of just 1 liter poses a risk of death, it is critical that excessive bleeding be controlled in the shortest amount of time possible.

There are three main types of bleeding. The type can usually be identified by how fast the blood flows.

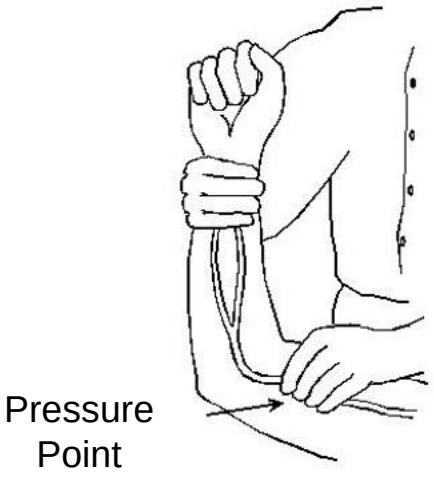
- ***Arterial Bleeding.*** Arteries transport blood under high pressure. Therefore, bleeding from an artery is *spurting bleeding.*
- ***Venous Bleeding.*** Veins transport blood under low pressure. Bleeding from a vein is *flowing bleeding.*
- ***Capillary Bleeding.*** Capillaries also carry blood under low pressure. Bleeding from capillaries is *oozing bleeding.*

There are three main methods for controlling bleeding:

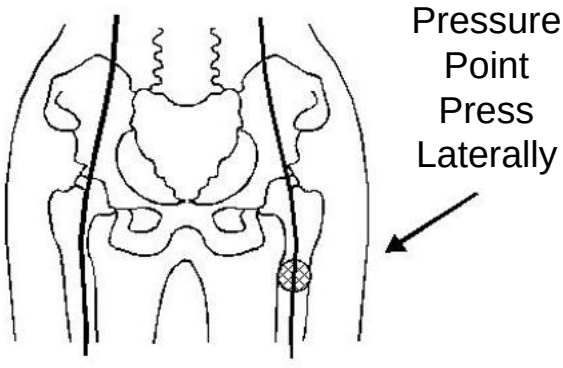
- Direct local pressure.
- Elevation.
- Pressure points.

If you cannot control the bleeding using one method, try another, or a combination of methods.

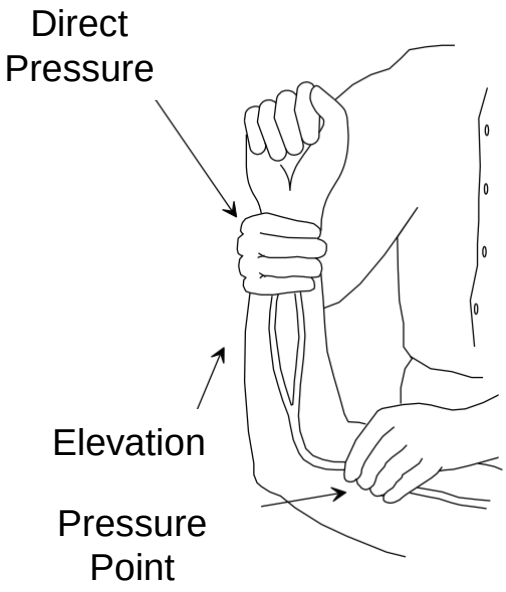
An illustration of the three main methods to control bleeding is shown in the figure below.

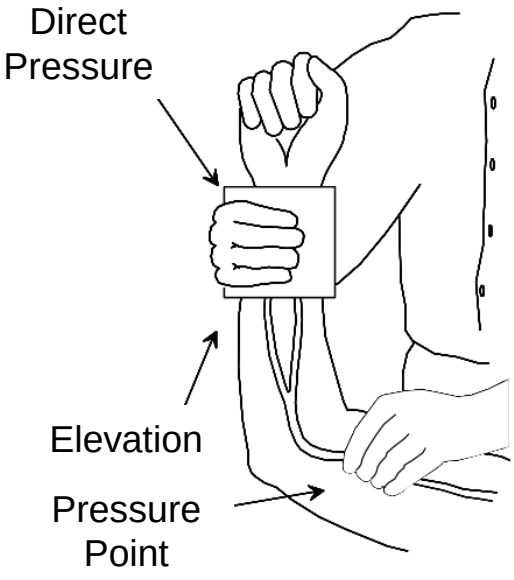


Brachial Pressure Point



Femoral : Pressure Point





Methods for Controlling Bleeding by using direct pressure on wound, elevation, and pressure points.

6.4.3

Recognizing And Treating For Shock

Shock is a disorder resulting from ineffective circulation of blood. Remaining in shock will lead to the death of cells, tissues, and entire organs.

Initially, the body will compensate for blood loss, so signs of shock may not appear immediately. It is important, therefore, to continually evaluate and monitor the victim's condition.

The main signs of shock that CDRT members look for are:

- ✓ Rapid and shallow breathing.
- ✓ Capillary refill of greater than 2 seconds.
- ✓ Failure to follow simple commands, such as, "Squeeze my hand."
- ✓ Changes in skin color.
- ✓ Capillary refill is how long it takes for the color to return.

Procedures For Controlling Shock

To treat a person for shock, follow the steps in the table below.

STEP	ACTION
1	▪ Lay the victim on his or her back. ▪ Elevate the feet 6-10 inches above the level of the heart. ▪ Maintain an open airway.
2	▪ Control obvious bleeding.
3	▪ Maintain body temperature (e.g., cover the ground and the victim with a blanket if necessary).
4	▪ Avoid rough or excessive handling unless the rescuer and victim are in immediate danger.

A photo of correct shock position is shown below.

Shock Position

Do *not* give a victim who is suffering from shock anything to eat or drink. People in shock may be nauseous and thirsty.

6.5

Triage

When working in a disaster with multiple casualties, the first goal is ***Simple Triage And Rapid Treatment*** (START). START is a process where victims are classified into one of four categories based of the severity of their injuries. Please note that this is done by medical professions. At a CDRT level, victims are placed into one of two categories as explained below.

In a disaster scenario, you may have many victims requiring attention and few resources to use. The remainder of this chapter will address the triage system for analyzing victim condition and prioritizing treatment.

6.5.1

What is Triage?

Triage is a French verb, meaning "to sort." Victims are evaluated, sorted by immediacy of treatment needed, and set up for immediate or delayed treatment.

Experience has shown that triage is an effective strategy in situations where:

- Rescuers Are Overwhelmed,
- There Are Limited Resources,
- And Time Is A Critical Factor.

There Are 2 Categories Of Victims In Triage:

Acute:
Individuals who need help right away. These victims are the priority group for assistance;

Non-acute:
Though the victim may be severely wounded, his /her situation is stable and does not require immediate assistance. More urgent cases will receive assistance first;

The rescuer's safety is paramount during triage. Wear proper protective equipment so as not to endanger your own health.

6.5.2
Performing A Triage Evaluation

The general procedures for conducting triage are:

✓ ***Step 1: Stop, Look, Listen, and Think***.

Before you start, stop and size up the situation by looking around and listening. THINK about your safety, capability, and limitations, and decide if you will approach the situation and how.

✓ ***Step 2: Conduct Voice Triage.***

Begin by calling out, “Emergency Response Team. If you can walk, come to the sound of my voice.” If there are survivors who are ambulatory, instruct them to remain at a designated location, and continue with the triage operation. (If rescuers need assistance and there are ambulatory survivors, then these survivors should be asked to provide assistance.) These persons may also provide useful information about the location of the victims.

✓ ***Step 3: Start where you stand, and follow a systematic route.***

Start with the closest victims and work outward in a systematic fashion.

✓ ***Step 4: Evaluate each victim and tag them***

“Acute” (immediate assistance) or **“non acute”** (can wait for help). Remember to evaluate the walking wounded.

Use The Procedures Below When Performing Triage.

Step	Procedures
1	Check airway/breathing. At an arm's distance, shake the victim and shout. If the victim does not respond: ▪ Position the airway. ▪ Look, listen, and feel. ▪ Check breathing rate. Abnormally rapid respiration (above 30 per minute) indicates shock. Treat for shock and tag "acute." ▪ If below 30 per minute, then move to Step 2. ▪ If the victim is not breathing after 2 attempts to open airway, then the victim is tagged dead and there is nothing you can do.
2	▪ Check circulation/bleeding. ▪ Take immediate action to control severe bleeding. ▪ Check circulation using the blanch test (for capillary refill). • Press on an area of skin until normal skin color is gone. A good place to do this is on the palm of the hand. The nailbeds are sometimes used. • Time how long it takes for normal color to return. ▪ Treat for shock if normal color takes longer than 2 seconds to return, and tag "acute"
3	Check mental status. Give a simple command, such as "Squeeze my hand." Inability to respond indicates that immediate treatment for shock is necessary. Treat for shock and tag "acute"

If the victim passes all tests, his or her status is "**non acute**". If the victim fails one test, his or her status is "**acute.**" Remember that ***everyone gets a tag.*** All victims tagged "acute" get airway control, bleeding control, and treatment for shock.

✓ ***Step 5: Treat "acute" victims immediately.*** Initiate airway management, bleeding control, and treatment for shock for **"acute"** victims.

✓ ***Step 6: Document triage results for:***

- Effective deployment of resources.
- Information on the victims' locations.
- A quick record of the number of casualties by degree of severity.

Time will be critical in a disaster. You will not be able to spend very much time with any single victim.

Take advantage of local exercises as a means of maintaining your triage skills and to avoid the triage pitfalls. There are several common problems or pitfalls in triage operations that can be avoided through careful planning and preparation.

Triage Pitfalls Include:

- No team plan, organization, or goal.
- Indecisive leadership.
- Too much focus on one injury.
- Treatment (rather than triage) performed.

Remember, triage is a process that needs to be *practiced.* Practicing triage in disaster simulations as often as you can will help you avoid these pitfalls

CDRT training does not include official First Aid Training. To learn First Aid Training please contact your National Society for more information.

You should now be able to:

- ✓ Open airways, control bleeding, and treat shock is critical to saving lives.
  - Use the Head-Tilt/Chin-Lift method for opening airways.
  - Control bleeding using direct pressure, elevation, and/or pressure points.
  - If there is a question about whether a victim is in shock, treat for shock.
- ✓ Carry out triage to evaluate victims' injuries and prioritize them for treatment. The procedure for conducting triage evaluations involves checking:
  - The airway and breathing rate.
  - Circulation and bleeding.
  - Mental status.

Additional Resources

1) Epidemic Control for Volunteers: http://ifrcgo.org/ecv-toolkit/

2) Community-Based Health and First Aid (eCBHFA): http://ifrc-ecbhfa.org/guides-and-tools/

UNIT 07 Fire Safety

OBJECTIVES

In this unit you will learn about:

Fire Basics

Fire Chemistry

How fire occurs, classes of fire, and choosing the correct means to extinguish each type of fire.

Fire Hazards

Potential fire hazards in the home and workplace and fire prevention strategies.

Fire Classifications and how to extinguish a fire.

Fire Prevention

Fire Fighting Agents and Portable Fire Extinguishers.

Fire Safety

At the end of this unit, you should be able to:

- ✓ Reduce fire hazards at home or in public places in the community
- ✓ Identify which fires you are in a situation to extinguish, based on the type of fire and the available equipment
- ✓ Identify when a fire CANNOT be dealt with locally

7.1 CDRTs and Fire Safety

CDRTs play a very important role in fire safety by:

Extinguishing small fires before they become major fires. This unit will provide training on how to use an extinguisher to put out small fires—and how to recognize when a fire is too big to handle.

Preventing additional fires by removing fuel sources. This unit will also describe how to ensure that a fire, once extinguished, is completely extinguished and stays extinguished.

Shutting off utilities, when necessary and safe to do so.

Assisting with evacuations where necessary. When a fire is beyond the ability of CDRTs to extinguish, CDRT members need to protect life safety by evacuating the area, when necessary, and establishing a perimeter.

Educating communities on fire safety. Educate persons within your community about fire safety and the importance of having a family emergency evacuation plan.

Call Fire Department. CDRTs must remember to contact the fire service if the fire is beyond the ability of the CDRT to extinguish the fire.

Rescuer safety is <u>always</u> the number one priority. Therefore, if the fire is too large to extinguish using a fire extinguisher, then the CDRT must raise an alarm to evacuate the building and call the fire department.

The CDRT goal is to do the greatest good for the greatest number.

7.2
Fire Basics

Fire can be defined as a chemical reaction known as rapid oxidation that produces heat and light in the form of flames.

The following are common terms to describe the nature of a fire:

Flash Point
The lowest temperature at which a flammable substance gives off vapours that will burn.

Fire Point
The lowest temperature at which a fuel will continue to burn after ignition.

Spontaneous Combustion
This is also called the auto-ignition/ when a substance or material ignites without the introduction of an outside source.

7.2.1
Fire Chemistry

There are three elements that must be present to start a fire:

Fuel - Fuel is any material that will burn. Fuel can be solid material such as wood, clothing and plastics or it can be flammable liquids such as petrol, oils and solvents or it can be flammable gases such as propane, LPG and gasoline. The type and quantity of the fuel will determine which method should be used to extinguish the fire.

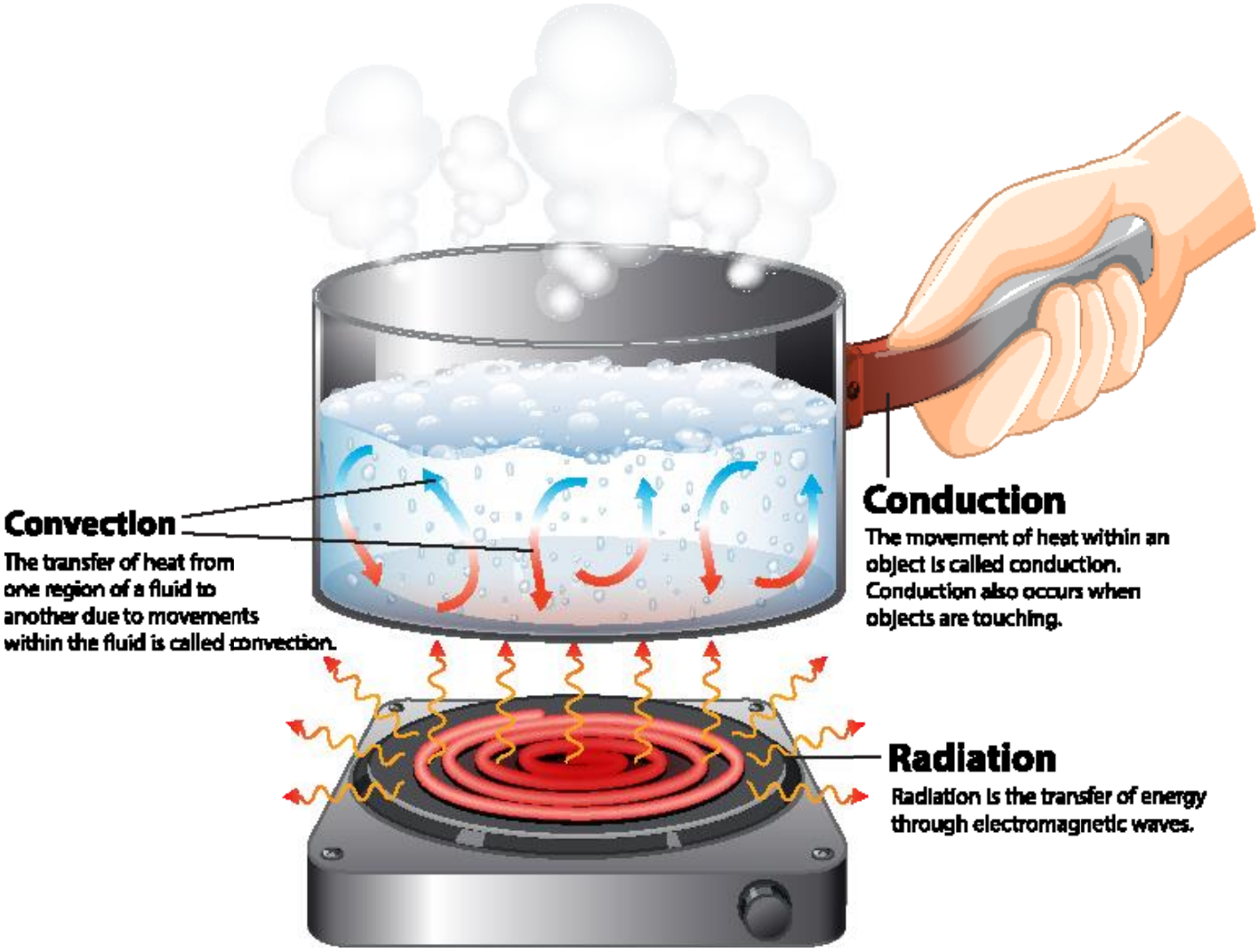
Heat - Heat refers to anything that raises the temperature of a fuel source. Sources of heat include mechanical friction, electrical high current, static charge/discharge and chemical reactions

Oxygen - Air normally contains 21% of oxygen and most fires will burn vigorously in any atmosphere of at least 20% oxygen. Smoldering can take place with as little as 3% oxygen and without oxygen, most fuels could be heated until entirely vaporized, yet would not burn.

Heat Transference

Heat can be transferred in three ways:

- **Conduction** – The direct transfer of heat from one material (solids and liquids) to the next.
- **Convection** - The transfer of heat through the motion of smoke and hot gases in the air.
- **Radiation** – The transfer of heat by electromagnetic waves in the air.



7.2.2
Stages Of A Fire

STEP 01

Incipient Stage

The incipient stage or is the beginning of a fire where the temperature is low, the fire is localized in the vicinity of its origin and smoke has not yet reduced visibility in the vicinity of the fire.

Growth Stage

In the growth stage the fire size continues to increase in size by generating its own heat and plumes of smoke is visible.

STEP 02

STEP 03

Fully Developed

In this stage the fire is at its hottest point and all flammable materials in the space is burning. The rate of burning is also limited to the amount of oxygen present and during this stage, all persons should stay clear of the fire.

Decay Stage

The fire has consumed all available oxygen and fuel and can no longer sustain itself. The temperature starts to decrease, and the fire becomes less intense until the combustion fully stops.

STEP 04

7.3
Fires at Home

Most household fires start in the kitchen or are caused by faulty or old appliances. The following are some tips fir ensuring that you keep your home safe:

7.3.1
Kitchen Fires

- Stay in the kitchen while cooking on stovetops.
- Ensure that the area around the microwave is free of clutter.
- Do not use water to stop a grease fire, use a lid to cover the pan or pot or use a fire extinguisher.

7.3.2
Fires Caused By Faulty Or Old Electronic Appliances

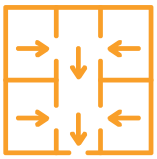
- Unplug appliances when not in use.
- Don’t run extension cords under rugs.
- Check cords of appliances for wear and tear periodically.
- Ensure that electrical outlets are not overloaded.

7.4
Fire Prevention At Home

You can do the following to further safeguard your home from fires:

1) Install Fire Alarms

- Test them once a month.
- Ensure all household members, including children, know what to do when they hear the fire alarm.
- Practice fire drills at home.



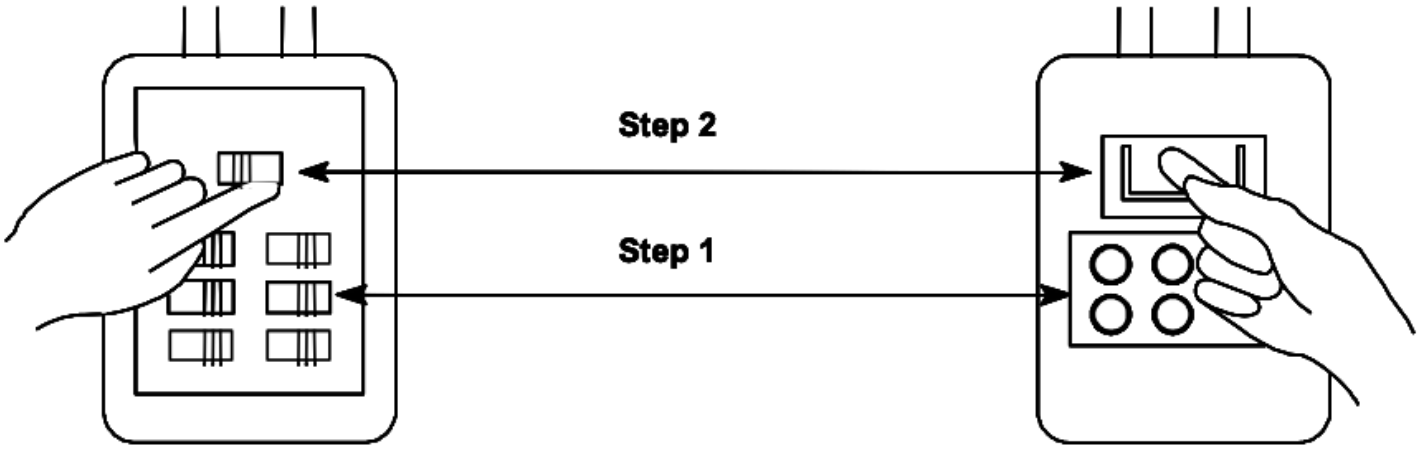
2) Develop An Evacuation Plan

- Ensure all household members know of two ways to escape from every room.
- Keep keys for burglar proof windows in a safe place that is easily accessible.

3) Other Tips

- Keep matches and lighters out of the reach of children .
- Store all flammable liquids or hazardous chemicals in a safe place away from heat releasing objects or appliances.
- Avoid clutter or pile up of old newspapers.
- Ensure all household members know the number for the fire department.
- Learn how to switch off circuit box/fuse box (see diagram below).

Switching Off Circuit Box/Fuse Box



CIRCUIT BOX WITH SHUTOFF

Circuit box showing shutoff steps.

Step 1: Shut off individual breakers.

Step 2: Shut off main breaker.

FUSE BOX WITH SHUTOFF

Fuse box showing shutoff steps.

Step 1: Pull out individual fuses.

Step 2: Pull out main fuse.

7.5
Fires At The Workplace

The following are the main causes of fires at the workplace:

- Neglect and overloading of electrical outlets.
- Smoking and not discarding of cigarette butts or lit matches appropriately.
- Improper storage of flammable liquids and hazardous chemicals.
- Clutter and pile up of shredded paper or old newspapers.

7.5.1
Fire Prevention At The Workplace

You can do the following to further safeguard your workplace from fires:

1) Install Fire Alarms and Sprinkler System

- Test the fire alarm once a month.
- Ensure all employees know what to do when they hear the fire alarm.

2) Develop An Evacuation Plan

- Post fire escape plans on every level of the building.
- Assign and train safety wardens on every level of the building.
- Teach employees about exit locations, escape routes and where the fire extinguishers are located.
- Practice drills regularly.
- Keep emergency exits free of clutter.

7.6

Fire Classification

Fires are categorized into classes based on the type of fuel that is burning:

Class A Fires

Ordinary combustibles such as paper, cloth, wood, rubber, and many plastics.

Class B Fires

Flammable liquids (e.g., oils, gasoline) and combustible liquids (e.g., charcoal lighter fluid, kerosene). These fuels burn only at the surface because oxygen cannot penetrate the depth of the fluid. Only the vapor burns when ignited.

Class C Fires

Energized electrical equipment (e.g., wiring, motors). (When the electricity is turned off, the fire becomes a class A fire.)

Class D Fires

Combustible metals (e.g., aluminum, magnesium, titanium).

7.7

Extinguishing Fires

A fire can be extinguished through the removal of one or more of the three elements required for a fire, that is fuel, heat and/or oxygen. This could be done via the following ways:

Cooling – Cooling occurs when heat is either eliminated or reduced below the temperature needed for ignition. A common method of cooling is by using water.

Starving – Starving is the removal of the fuel needed to sustain a fire as a fire will keep burning once there is combustible material present. Starving can be done by turning off the gas supply.

Smothering – Smothering is the removal of oxygen and is most applicable to solid fuel fires. Smothering can be achieved by using a fire blanket.

7.7.1
Fire Extinguishers

Fire extinguishes uses various fire agents (liquids, solids and gases) which help to either cool or smother a fire. The types of fire agents used are as follows:

Water
This is the most common agent used to remove heat by cooling. It is the most effective method used to put out a class A fire.

Aqueous potassium carbonate (APC)
It is used on Class B fires. It extinguishes burning cooking oil and grease in deep fat fryers in kitchens. Upon contact with the burning surface the (APC) releases a soapy foam. This foam releases carbon dioxide glycerin bubbles that float on top of the grease, preventing air from reaching the fire.

Aqueous Firm Forming Form (AFFF)
It is also used on Class B fires. When applied, it creates a foam blanket which floats on the flammable fluid starving the fire of oxygen.

Carbon Dioxide
It is used on Class B and Class C fires. It smothers a fire by reducing the amount of oxygen available for combustion. This can be found in portable extinguishers and is effective within rages of 4 – 6 feet.

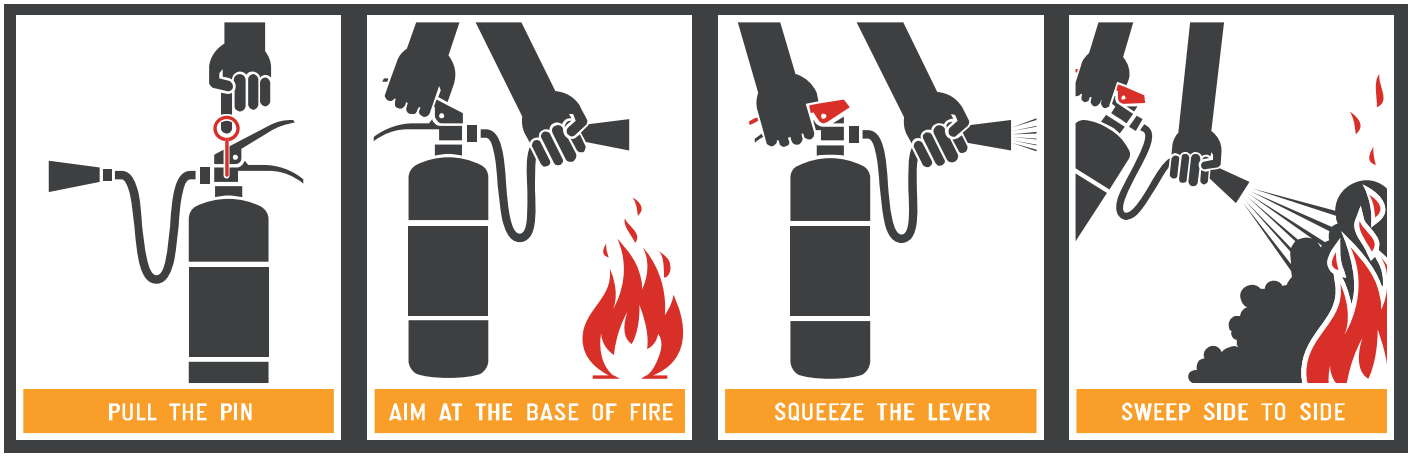
Purple Potassium Powder (PKP)
It is used on Class B and C fires. It is a dry chemical agent that extinguishes the fire by interrupting the chemical chain reaction. This should not be used on electrical or electronic equipment as it can cause damage to them. This is found in portable extinguishers and can be effective up to 19 feet away from the fire.

The proper agent to use in a given situation will depend on the class of the fire, the location of the fire, the extent of the fire and the availability of fire fighting equipment.

The table below summarizes the type of extinguisher to be used for each of the different Classes of Fire:

Fire Type		Extinguishing	
		Agent	**Method**
 Ordinary Solid Materials	A	Water	Removes Heat
 Flammable Liquids	B	Foam	Removes Air & Heat
		Dry Chemical	Breaks Chain Reaction
		Foam CO^2	Removes Air
 Electrical Equipment	C	Dry Chemical	Breaks Chain Reaction
		CO^2	Removes Air
 Combustable Metals	D	Dry Chemical	Breaks Chain Reaction
		Special Agents	Usually Removes Air

How To Use A Fire Extinguisher: P.A.S.S



7.8
Making A Decision

Can I escape quickly and safely from the area if I attempt to extinguish the fire?
NO → **LEAVE IMMEDIATELY and CALL THE FIRE DEPARTMENT!**
YES

Do I have the right type of extinguisher?
NO → **LEAVE IMMEDIATELY and CALL THE FIRE DEPARTMENT!**
YES

Is the extinguisher large enough for the fire?
NO → **LEAVE IMMEDIATELY and CALL THE FIRE DEPARTMENT!**
YES

Is the are free from other dangers such as hazardous materials and falling debris?
NO → **LEAVE IMMEDIATELY and CALL THE FIRE DEPARTMENT!**
YES

EXTINGUISH THE FIRE!

7.9

Safety Rules

Store a fire extinguisher at home and at the workplace.

Always have two ways to exit the fire area. Fires spread much faster than you might think. Always have a backup escape plan in case your main escape route becomes blocked at home and at the workplace.

Feel closed doors with the back of the hand, working from the bottom of the door up. Do not touch the door handle before feeling the door. If the door is hot, there is fire behind it. Do not enter! Opening the door will feed additional oxygen to the fire.

Confine the fire, whenever possible, by keeping doors closed.

Stay low to the ground. Smoke will naturally rise. Keeping low to the ground will provide you with fresher air to breathe.

Maintain a safe distance. Remember the effective range of your fire extinguisher. Don't get closer than necessary to extinguish the fire.

Overhaul the fire to be sure that it is extinguished—and stays extinguished.

7.9

Safety Rules

DON'TS

Store a fire extinguisher at home and at the workplace.

Get Too Close
Stay near the outer range of your extinguisher. If you feel the heat, you are too close.

Try To Fight A Fire Alone
Remember that your first priority is your personal safety. Don't put yourself at risk.

Try To Suppress Large Fires
Learn the capability of your equipment, and do not try to suppress a fire that is clearly too large for the equipment at hand (i.e., a fire that is larger than the combined ratings of available fire extinguishers).

Enter Smoke Filled Areas
Fire suppression in smoke-filled areas requires equipment that CDRTs don't have.

Enter Buildings
That are structurally compromised and dangerous.

Attempt Fire Rescues
That is beyond your level of training.

You should now be able to:

- ✓ Reduce fire hazards at home or in public places in the community
- ✓ Identify which fires you are in a situation to extinguish, based on the type of fire and the available equipment
- ✓ Identify when a fire CANNOT be dealt with locally

UNIT 08 Communication

OBJECTIVES
In this unit you will learn about:

Explain what is communication

Communicate effectively

Explain what is Community Engagement and Accountability (CEA)

Assess barriers to effective communication

Communicate in times of disaster

Describe what is a two-way radio

Explain the basics of using a two-way radio

At the end of this unit, you should be able to:

- ✓ Communicate effectively
- ✓ Understand Community Engagement and Accountability (CEA)
- ✓ Understand the basics of using a two-way radio
- ✓ Communicate in times of disaster

8.0

Understanding Communication

A process by which information is exchanged between individuals through **a common system of symbols, signs, or behaviour**. In its simplest form, it can be defined as an **exchange of information**.

The image emphasizes that communication is not always with smart technology, even though we live in a digital age. The simplest tools such as miking, loud speaker announcements, word of mouth etc can be effective based on if the disaster is so catastrophic and some of the digital means are down and not available; persons return to traditional ways of messaging/communicating.

8.1

Communicating Appropriately

Communication skills are needed for transferring information for different phases of an emergency.

CDRTs MUST CONSIDER:

- ✓ - Preferred method of communicating in the community
- ✓ - Timeliness of communicating (how to get information to the right people fast)
- ✓ - Vulnerable Groups
- ✓ - Appropriate communication tools

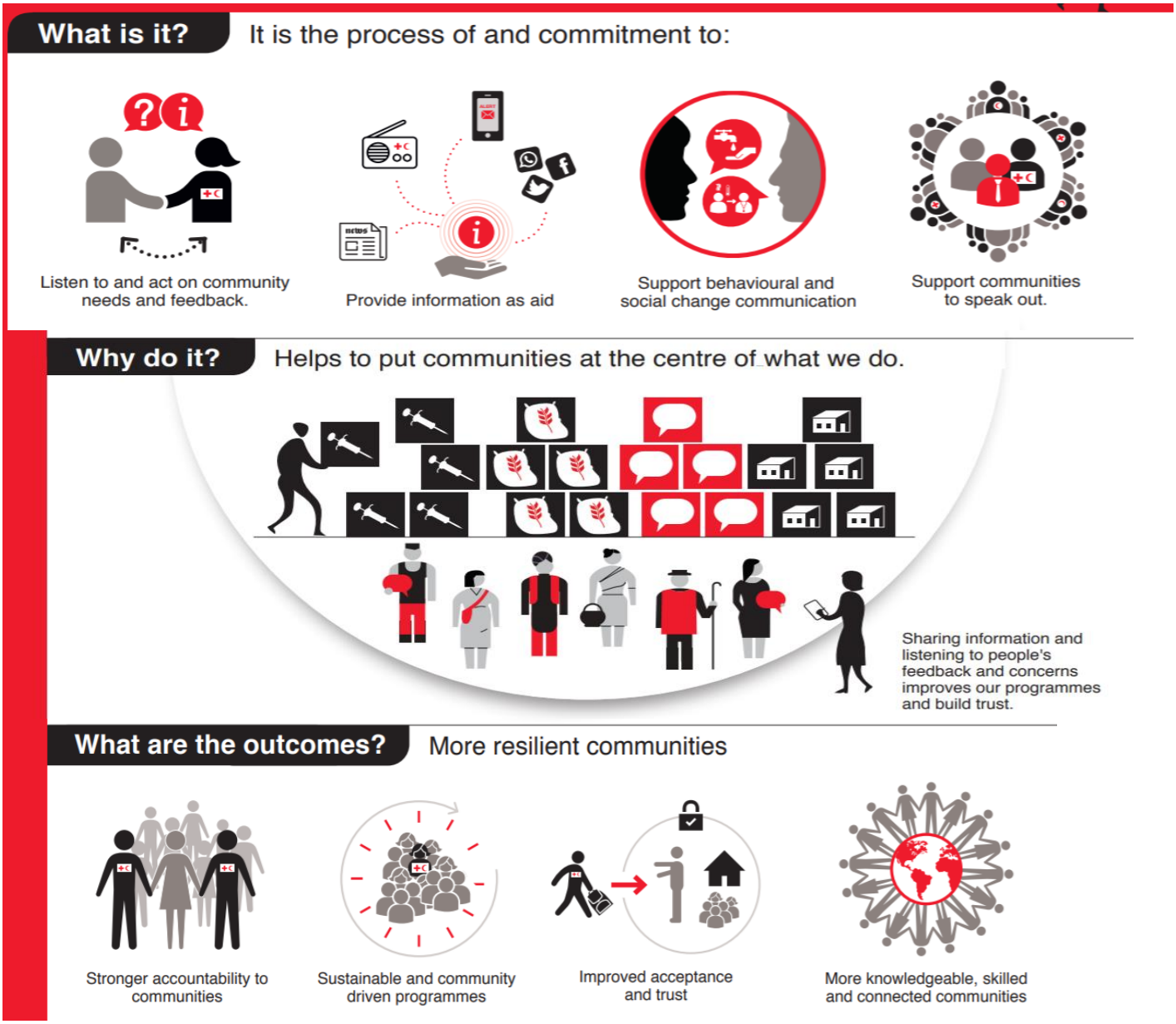
8.2

Community Engagement

It is important to ensure communication and participation of community members in any programmes or operations being done. It is important to engage communities to address unhealthy and unsafe practices and to encourage them to speak out about issues that affect them and influence decision makers to implement positive change.

8.2.1
What is Community Engagement and Accountability (CEA)?

It is an approach used by the Red Cross to ensure that communities are at the centre of the work being done by integrating communication and participation throughout programme cycles and operations.



8.2.2
Why is Community Engagement and Accountability Important?

- Leads to better, more effective programming
- Improves acceptance and trust
- Feedback and complaints are useful to bettering systems
- Help to saves lives
- Empower people and builds community resilience
- Supports positive behavior and social change
- Recognises the community as experts and partners
- Supports the NS to fulfil their auxiliary role
- Contributes to “do no harm” programming
- Helps to manage community expectations

8.3
Communicating Before A Disaster

It is important to engage with communities before a disaster strikes to help them become better prepared and more resilient. As mentioned in previous chapters, CDRTs can help communities by increasing their knowledge of the hazards that can affect them and what they can do to better protect their properties, livelihoods and prevent loss of lives.

CDRTs can also guide discussions with communities to help them identify their risks, vulnerabilities and develop community plans that can make them better prepared.

Keep the following in mind when communicating and engaging with communities before a disaster:

Ensure Community Participation And Feedback

When engaging with communities share honest, timely and accessible information which meet their needs and are relevant to them.

Ensure representation from all parties in the community including men and women, persons with disabilities and the elderly and ensure that all are treated fairly. Also Promote open discussions and establish a feedback system where community members can voice their opinions.

Encourage Behaviour And Social Change Communication

Encourage open communication that allows insight into the perceptions and behaviours of different groups.

This can help CDRTs understand how to approach the communities and what messages to use that will encourage communities to adopt safer and healthier practices.

Use Community-based Information To Help With Advocacy

Community members are experts on the challenges that affect them and their solutions, but they can find it difficult to make their voices heard by the relevant authorities or organizations.

CDRTs can help communities to understand how to use their knowledge and information to speak out about the issues that affect them and make their voices heard to influence decision-makers to take action.

8.4

Communicating In Disasters

When communicating is disasters, we must ensure we consider these things when sending messages:

- Provide timely, accurate, life saving information to the affected population using local media.
- Provide information intended to save lives and prevent further challenges.
- Provide information on what to do to help protect their homes and families.
- Provide information on where to get assistance
- Provide information regarding their legal rights and who is in charge

CDRTs can help empower the community to provide information for community early warning to a hazard, give field updates to assist agencies in coordinating proper response and truly represent the needs of the community which can then be filtered upward and communicated to National Disaster Offices, first responder agencies, who can then coordinate for regional assistance and resources if required.

8.5

Communication Barriers

Linguistic and cultural diversity. The Caribbean population speaks many languages (English, Spanish, French, Creole, Dutch, etc.) and represents a range of community and societal structures.

Exposure to a range of hazards. Many of the stakeholders expressed concern that while disaster risk reduction information tends to focus on a dominant hazard, namely, hurricanes, the region is exposed to a wide range of hazards, including tsunamis, floods, earthquakes, volcanic eruptions and landslides.

Small and relatively undiversified economies. The Caribbean economy is highly dependent on coastal resources, for import of critical staples and for economic outputs, such as the tourism and shipping industries. The lack of economic and capital diversification magnifies the impact of disasters on smaller economies with fewer resources to absorb the consequences of hazards and finance the recovery from disaster.

Variable access to, and use of ICT technologies. Some areas of the Caribbean rely on Internet- based resources, mobile telephony, social media and the like to communicate DRR information. Other areas lack access to Internet connectivity and must communicate information by other means.

Variations in demography which strongly influence the use of technology, with youth more likely to engage online and older adults less likely to do so, even when connectivity is available. Roughly two-thirds of the region's population is under the age of thirty.

8.6
Develop a CDRT Communications Plan

When it comes to disasters, obtaining and sharing accurate information can help save lives, prevent further challenges and protect homes and livelihoods It is important to develop a simple communication plan which outlines:

- How CDRTs are activated
- How CDRTs communicate with each other
- Who and how CDRTs can communicate with the National Society
- Who and how CDRTs can communicate with the National Disaster Office
- Identify other relevant stakeholders and identify who, how and when these stakeholders should be contacted.

8.7
Modes of Communication

The following are some of the methods through which disaster messages can be shared and received:

Runner: Individuals carrying messages from one person to another in a different location.

Landline Telephones: Analog and digital phones connected to physical lines.

Cell Phones: Digital phones connected by signal transmitted by cellular phone towers.

Two-way Radios: Handheld, mobile, or base-station radios used for communicating on radio frequencies which may require a licence from the Federal Communications Commission.

Electronic: Computer-based communications that may be transmitted over the internet or with runners via USB drives.

8.7.1
Two – Way Radios

Relaying information using traditional modes of communication such as via landline phones, cell phones or using the internet may not be possible after a disaster. When CDRTs are called out to assist, they might be asked to use a two-way radio.

What Is A Two-way Radio?

It is a communications mode that does not rely on external power supplies or physical communications infrastructure. This makes two-way radios a good communications mode during an emergency.

Two-way radios include a variety of devices and are often defined by the frequencies (or channels) they are designed to operate on. Radios capable of more powerful transmissions typically require a license from the Federal Communications Commissions.

How Do They Work?

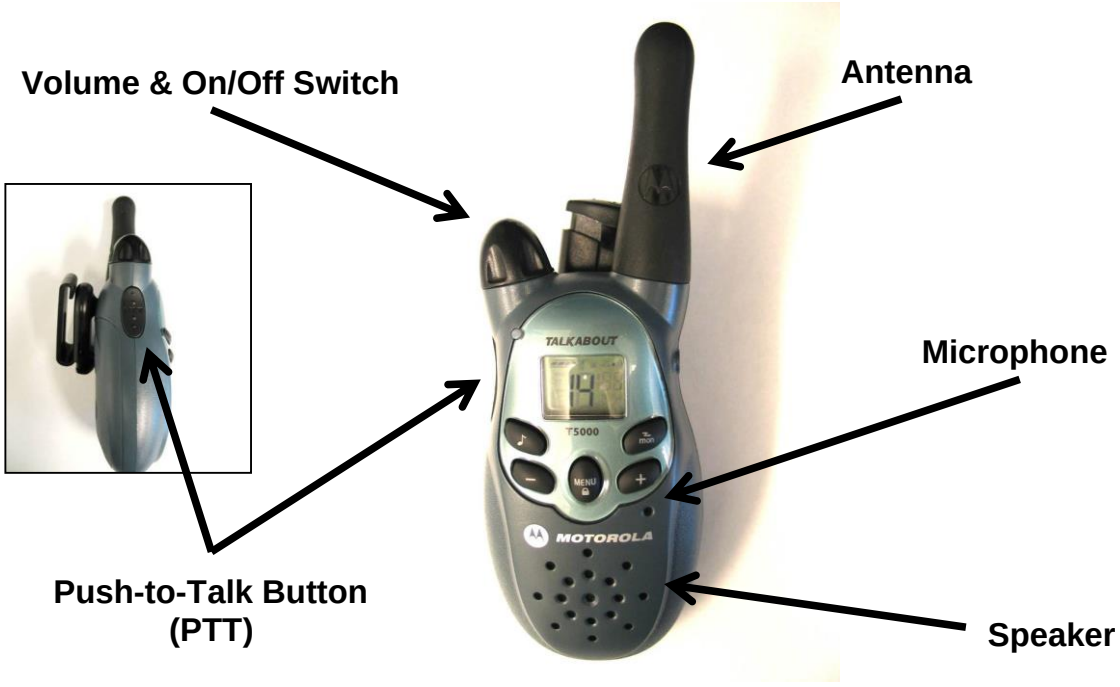
Two-way radios operate by transmitting and receiving on certain frequencies. No one owns or has exclusive rights to a frequency, but the Federation Communications Commissions determines who can use them and when.

On radios, frequencies are typically divided into a number of discrete channels. Since only one person can speak on a channel at a time, more channel availability means that more conversations can happen in the area. Each team is typically assigned a channel to use as part of the communications plan.

What Does A Two-way Radio Look Like?

8.7.2
Tips On Using A Two-way Radio

- Select a channel
- Press the Push-to-talk button when speaking
- Speak across the radio microphone rather than directly into it.
- Keep the antenna in a vertical position when talking.
- Release the push-to-talk button when done speaking.



Familiarise Yourself with the Phonetic Alphabet

The phonetic Alphabet is used when spell words or identify tricky letters. The following is the phonetic alphabet:

Phonetic Alphabet

A--Alfa
B--Bravo
C--Charlie
D--Delta
E--Echo
F--Foxtrot
G--Golf
H--Hotel
I--India
J--Juliet
K--Kilo
L--Lima
M--Mike
N--November
O--Oscar
P--Papa
Q--Quebec
R--Romeo
S--Sierra
T--Tango
U--Uniform
V--Victor
W--Whiskey
X--X-ray
Y--Yankee
Z--Zulu

8.7.3
Effective Communication Tips

When communicating important information in a disaster:

- Be simple
- Clearly communicate the threat
- Provide a call to action
- Be accessible
- Reach out to as many people as possible
- Never cause harm or create a panic
- Coordinate with others

8.8
Working With Others

When working with other agencies or groups:

- Be aware of information being circulated it can become contradictory and disruptive causing isolation and fear among the affected communities

- Find out if there is an existing CEA group and join. This allows for sharing of information and improved planning on needs and state of local media and communications

- Coordinate with other departments in your NS and be aware of the information shared as this will provide for better CEA involvement

You should now be able to:

- ✓ Understand communication
- ✓ Communicate effectively
- ✓ Identify when a fire CANNOT be dealt with locally
- ✓ Understand Community Engagement and Accountability (CEA)
- ✓ Assess barriers to effective communication
- ✓ Understand what is a two-way radio
- ✓ Understand the basics of using a two-way radio
- ✓ Communicate in times of disaster

Additional Resources:

1. IFRC Guide to Community Engagement and Accountability: https://media.ifrc.org/ifrc/wp-content/uploads/sites/5/2017/12/IFRC-CEA-GUIDE-0612-LR.pdf

UNIT 09

Light Search and Rescue

IFRC

CaDRiM Reference Centre
Caribbean Disaster Risk Management

DOMINICA RED CROSS

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OBJECTIVES
In this unit you will learn about:

What is Meant By Light Search and Rescue

Safety Precautions

The Nine-Step Sizeup Model

Helps with decision making and determining actions.

Conducting Rescue Operations

Safe techniques for lifting, leveraging, cribbing, and victim removal.

At the end of this unit, you should be able to:

- ✓ Identify when the CDRTs can intervene, and when Not To intervene.
- ✓ Identify where to look for victims
- ✓ Evacuate victims in a safe way
- ✓ Know your own limitations and those of your team.

This unit will focus on the components of an effective search and rescue operation—sizeup, search, and rescue—and the methods and techniques that rescuers can use to locate and safely remove victims. ***CDRTs must never put themselves in danger and must never attempt any type of search and rescue operations on their own.***

Much of the information in this Unit was taken from FEMA's Basic CERT Training Guide.

Search & Rescue

Search and rescue consists of three separate operations:

Size up

Involves assessing the situation and determining a safe action plan (using the nine-step sizeup model).

Search

Involves locating victims and documenting their location.

Rescue

Involves the procedures and methods required to extricate the victims.

9.1

Effective Size Up

Like every other operation, search and rescue requires sizeup at the beginning of the operation and continually for as long as the operation continues. Sizeup is a 9-step process. CDRTs can assist when needed and knowing the steps involved will allow you to provide better assistance.

Step 1 - Gather Facts

When gathering facts, CDRT the following should be considered:

The Time Of The Event And Day Of The Week:
At night, more people will be in their homes, so the greatest need for search and rescue will be in residential settings. Conversely, during the day, people will be at work, so the need will be in commercial buildings.

Some emergency services are not available—or not available in the same numbers—during the evenings or on weekends. Search and rescue operations may also be affected by where people are located in their homes and the amount of daylight available.

The Type Of Structure:
The purpose for which the structure was designed may indicate the likely number of victims, and their location.

Construction Type:
Some types of construction are more susceptible to damage than others.

Weather:
Severe weather will have an effect on victims and rescuers alike and will certainly hamper rescue efforts. Forecasts of severe weather should be considered as a limiting factor on the time period during which search and rescue operations can occur.

Hazards: Knowledge of other potential hazards in the general and immediate areas is important to search and rescue efforts.

Step 2 - Assess and Communicate Damage

Effective scene management requires the formulation and communication of goals and objectives that are based primarily on the **safety of rescue personnel**. Rescue efforts should always be based on the degree of damage.

Determine the extent of damage to the building.

- Take a lap around the building and examine the exterior.
- Observe the ground around the building.
- Examine the safety of non-structural elements.
- Watch for the presence of THREATS.
- Document the result of the assessment to be shared with responder agencies.

The question to ask is always: **Is it safe to attempt this rescue?** The Table below will help you to answer that question.

Assessment Of Damaged Structures	Degree Of Damage	Should Rescue Be Attempted?
Partial or total collapse of walls and/or ceilings; obvious structural instability; tilting; off foundation; heavy smoke or fire; gas leaks; hazardous materials inside; rising or moving water	Heavy	**No. Too dangerous to enter.** Secure the perimeter and control access into the structure. Warn people to stay away
Visible signs of minor structural damage; decorative work that is damaged or fallen; many visible cracks in plaster; building still attached to foundation; major damage is to contents of building	Moderate	**Perform only quick and safe removals.** Limit onsite medical care to checking for breathing, stopping major bleeding, and treating for shock. Minimize the number of rescuers inside the building.
Superficial damage, broken windows, fallen plaster, major damage is to contents of building	Light	**Yes.** Locate, triage, and prioritize removal of victims to the designated treatment area.

Do I Attempt A Rescue?

Heavy Damage = No rescue

Moderate Damage = Minimize rescuers and time in building

Light Damage = Locate, triage, treat, and prioritize victim removal

These are general guidelines for assessing damage. When in doubt about the condition of a building, always use the more restrictive assessment. If unsure about whether a building is moderately or heavily damaged, always assume heavy damage.

Remember: CDRTs should not work alone but under the supervision of the lead agency when needed. Always consider the level of damage encountered and the availability of the emergency services.

After—or in conjunction with— the damage assessment, always consider probable amounts of damage based on the type and age of construction. Experienced search and rescue personnel can determine probable damage to a structure based on the event and the types of structures involved.

Step 3 - Consider Probabilities

Because the CDRTs may assist with dangerous situations, considering what *will probably happen* and what *could happen* are of critical importance:

1. How Stable Is The Situation?

Even within a structure that appears from the outside to have only minimal or moderate damage, nonstructural damage or instability inside the structure can pose real danger to the rescue team.

Rescue personnel should think about what they already know about the structure that's been damaged. Do you know if there are chemicals, paints, or other potentially hazardous materials stored within the structure? Do you How are they stored? Where are they?

2. What Else Could Go Wrong?

What if the electricity fails during the search? What if a wall that appears stable shifts and collapses? Applying "Murphy's Law" (anything that can go wrong, will go wrong) to the situation could save lives.

3. What It All Means For The Search And Rescue.

Based on the probabilities, think about what can be done to reduce the risks associated with the probabilities that were identified. Is a spotter necessary to look for movement that could indicate a possible collapse and warn the rescue team? Is some remedial action required to stabilize nonstructural hazards before beginning the search?

STEP 4 - Assess Your Situation

Sizeup is a building process, with each step building upon the previous steps until the decision is made to begin the search and rescue operation (or that the situation is unsafe). Draw on answers from steps 1 through 3 to assess your situation to determine:

1. Is the situation safe enough to continue?
2. What are the risks that rescuers will face if they continue?
3. What resources will be needed to conduct the operation safely (and what resources are available)?

Search and Rescue Resource Planning Questions

Assessing resources is extremely important to search and rescue operations.

Resources	Planning Questions
Personnel	• Who lives and works in the area? • During which hours are these people most likely to be available? • What skills or hobbies do they have that might be useful in search and rescue operations? • What might be the most effective means of mobilizing their efforts?
Equipment	• What equipment is available locally that might be useful for search and rescue? • Where is it located? • How can it be accessed? • On which structures (or types of structures) might it be most effective?
Tools	• What tools are available that might be useful for lifting, moving or cutting disasters debris?

Knowing this information before a disaster happens is important. This type of information would be very useful to share with emergency personnel if they require additional resources. Share this information with your National Disaster Office and the local National Society.

Step 5 - Establish Priorities

After evaluating the situation, their next step is to determine:

1. What should be done?
2. In what order?

The safety of CDRT members is always the first priority and will dictate some of your other priorities. For example, removing or mitigating known hazards must be completed before teams begin to search. CDRTs should not attempt any type of search and rescue on their own. CDRTs can assist when needed and *should never* put themselves in danger.

Step 6 - Make Decisions

Emergency personnel can use the information gathered to make decisions about where to deploy their resources to do the most good, while maintaining an adequate margin of safety.

These priorities are based on (in order):

1. The safety of their members.
2. Life safety for victims and others.
3. Protection of the environment.
4. Protection of property.

Step 7 - Develop Plans of Action

Step 7 is where all of the information you have about the situation comes together. During step 7, emergency personnel will decide specifically how the team will conduct its operation, considering the highest priority tasks first.

Action plans do not need to be written, but when search and rescue operations are required, the situation is probably complex enough that a written plan of some type should be developed. Even a simple written plan will:

- Help focus the operation on established priorities and decisions.
- Provide documentation to be given to responding agencies when they arrive.
- Provide documentation that can be used, if necessary, after the incident.
- Urge the participants to keep a notebook for jotting notes when developing an action plan. These notes should include changes to the plan that are made based on new information that comes in.

Step 8 - Take Action

The plan developed during step 7 is put into action during step 8. Regardless of the severity of structural damage, rescuer safety must be the primary concern.

Two most frequent causes of rescuer deaths are:

- Disorientation.
- Secondary collapse.

The following guidelines are used during all search and rescue operations:

1. Use A Buddy System.
Always work in pairs, with a third person acting as a runner.

2. Be Alert For Hazards
(e.g., power lines, natural gas leaks, hazardous materials, sharp objects, overhead objects that could fall, etc.).

You should never attempt to search an area where water is present.

1. Use Safety Equipment.
Wearing gloves and a helmet will protect a rescuer's hands and head. The primary cause of rescuer problems after working in a structural collapse is breathing dust, so a dust mask is essential.

2. Have Backup Teams Available
to allow rotating of teams, prevent fatigue, and ensure help if a team gets into trouble. Have teams drink fluids and eat to keep themselves fresh.

Remember: A successful search and rescue depends on teamwork.

Step 9 - Evaluate Progress

Step 9, Evaluate Progress, is the most critical, not only in terms of evaluating whether the plan works, but also from a safety standpoint. Sizeup is ongoing and that information gained during step 9 needs to be fed back into the decision-making process for possible revision of priorities and updated action planning.

9.2

Locate Victims

9.2.1

Identifying Areas Of Entrapment - Voids

The first step in locating potential victims is to conduct a sizeup of the interior of the building to gather more precise information about damage and to develop priorities and plans. The data gathered will provide more information about areas of entrapment—or voids. There are several types of voids.

Pancake Voids

Pancake voids are most common in buildings that were constructed before 1933. They are created by the weakening or destruction of load-bearing walls, which allows the floors to collapse onto each other.

Unreinforced masonry structures are extremely dangerous. If CDRT members see pancake voids, this is considered heavy damage, and they should get out immediately.

Lean-to Void

Lean-To Void, in which a collapsed wall or floor leans against an outside wall, creates a void where the floor remains attached to the wall. A victim trapped in a lean-to void has the greatest chance of being alive. Lean-to voids also indicate structural instability.

If CDRT members see lean-to voids, they should note the location for professional responders but leave the building immediately!

"V" Void

The "V" voids are created by a "V" collapse of a floor or wall (the middle collapses and the ends lean against an outside wall). A "V" void creates two lean-to voids, one on either side of the collapse, in which victims can be trapped—but stress that the sloping floor caused by the "V" collapse presents a severe potential hazard to the rescue team.

If CDRT members encounter "V" voids, they should leave the building immediately.

Individual Voids

Individual voids are spaces into which the victim may have crawled for protection. Examples of individual voids include bathtubs and the space underneath desks. Children may seek shelter in smaller spaces like cabinets.

9.2.2
Estimating The Number Of Victims

- Determine the potential number of victims.
- Identify the most probable areas of entrapment.

Some of this information may be known through planning, but CDRT members may need to get some information by talking to bystanders or those who are familiar with the structure.

CDRT members should ask questions when talking with these individuals, including:

- How many people live (or work) in the building?
- Where would they be at this time?
- What is the building layout? What have you seen or heard?
- Has anyone come out? What are the normal exit routes from the building?

The group of bystanders may be confused by the event. They may tend to exaggerate potential numbers or may not even remember the event accurately. Gather as much information as you can, so you can share this with emergency personnel, as it will be useful to them for planning search priorities and implementing the search.

9.2.3
Search Methods

Experienced search and rescue personnel have found these search methods to be effective:

1. Call Out To Victims.

Begin the search by calling out to victims. Shout something like, "If anyone can hear my voice, come here." If any victims respond, give them further directions such as ***"Stay here"*** or ***"Wait outside"*** (depending on the condition of the building).

Ask victims who respond for any information that they may have about the building or others who may be trapped.

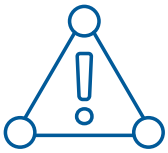
2. Use Systematic Search Pattern.

Ensure that all areas of the building are covered. Examples of systematic search patterns to use include:

- Bottom-up/top-down.
- Right wall/left wall.

3. Stop Frequently To Listen.

Listen for tapping, movement, or calls from victims.



4. Triangulate.

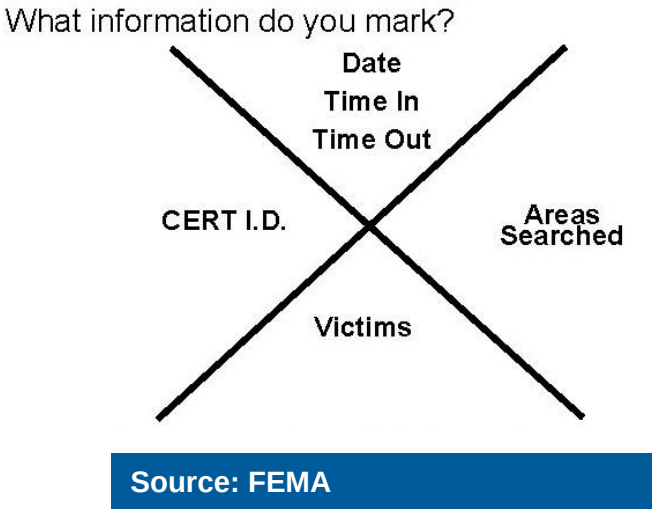
Triangulation enables rescuers to view a single location from several perspectives. Three rescuers, guided by victim sounds, form a triangle around the area and direct flashlights into the area.

The light shining from different directions will eliminate shadows that could otherwise hide victims.

5. Mark Searched Areas To Document Results.

Make a single diagonal slash next to the door just before entering a structure. Make an opposite slash (creating an "X") when all occupants have been removed and search and rescue efforts have been completed. The "X" signals to other potential searchers that the area has already been searched. This method:

- Indicates rescuer location.
- Prevents duplication of effort.



Source: FEMA

6. Report Results.

Keep complete records both of removed victims and of victims who remain trapped or are dead. Report this information to emergency services personnel when they reach the scene.

Know Your Limitations

Many volunteers have been injured or killed during rescue operations because they did not pay attention to their own physical and mental limitations. Always follow the instructions and advice of emergency personnel and ***Never*** attempt a search and rescue operation on your own.

9.3
Safety Precautions

The following are some additional safety precautions for all search and recue operations:

Emergency signals: Decide on signals that can be used to communicate and ensure signals are understood by all.

Escape routes and safe areas: Always establish safe areas and a safe route of escape in case of emergency. Before you enter any structure be sure you have a safe way out.

Assignment of a safety officer: Assign someone the responsibility to look out for the safety of the team.

Use of identification vests

9.4
Rescue Victims

9.4.1
Creating A Safe Rescue Environment

- Lift objects out of the way.
- Use tools to move objects.
- Remove debris.

Follow safety procedures. CDRT members should always use the proper safety equipment required for the situation and follow procedures and guidelines established by emergency personnel. These safety procedures may include:

- Working in pairs.
- Never entering an unstable structure.
- Lifting by bending the knees, keeping the back straight, and pushing up with the legs.
- Carrying the load close to the body.
- Lifting and carrying no more than is reasonable.

9.4.2
Removing Victims

The type of extrication method selected should depend on the:

- General stability of the immediate environment.
- Number of rescuers available.
- Strength and ability of the rescuers.
- Condition of the victim.

One-Person Arm Carry
The rescuer holds the victim around the victim's back and under the knees.

One-Person Pack-Strap Carry
The rescuer places the victim's arms over his or her shoulder and grabs the victim's hands over his or her chest, then hoists the victim by bending over slightly.

Two-Person Carry
Rescuer 1 squats at the victim's head and grasps the victim from behind at the midsection. Rescuer 2 squats between the victim's knees, grasping the outside of the knees. Both rescuers rise to a standing position.

Chair Carry
The victim is placed in a chair and tilted backward as rescuers lift the victim. This carry requires two rescuers:

- Rescuer 1: Facing the back of the chair, grasp the back uprights.
- Rescuer 2: Facing away from the victim, reach back and grasp the two front legs of the chair.

Both rescuers: Tilt the chair back, lift, and walk out.

Blanket Carry

This method requires at least six rescuers to ensure stability for the victim and that one rescuer must be designated the lead person:

Step 1: Lay a blanket next to the victim.

Step 2: Tuck the blanket under the victim, and roll the victim into the center of the blanket.

Step 3: With three rescuers squatting on each side and grasping a "handle," the lead person checks the team for even weight distribution and correct lifting position.

Step 4: The lead person calls out, "Ready to lift on the count of three: One, two, three, *lift.*"

Step 5: The team lifts and stands in unison— keeping the victim level—and carries the victim feet first.

The team must also lower the victim together, using the following steps:

Step 1: The lead person calls out, "Ready to lower on the count of three: One, two, three, lower."
Step 2: The team lowers the victim in unison, exercising caution to keep the victim level.

Blanket Drag

The victim is wrapped in a blanket with the rescuer squatting at the victim's head. The rescuer grasps the blanket behind the victim's head and drags him or her clear of the hazard.

9.4.3
Reporting

Where possible keep complete records of the removed victims and of victims that are trapped or dead. Report this information to the authorities when they arrive at the scene.

Remember: Safety First

Remember that the safety of CDRT members is always the first priority. Ensuring the safety of yourself and team members will dictate some of your other priorities.

Also remember that having personal protective equipment is not enough to ensure your safety, being trained in search and rescue is also very important to help minimise risk, injury and even death.

Important: *If you would like to become certified in search and rescue, identify the authorised agency in your country to find out if they train persons or identify any Community Response and Emergency Team (CERT) programmes in your community or region as members receive certified training.*

You should now be able to:

- ✓ Identify when the CDRTs can intervene, and when not to.
- ✓ Identify where to look for victims.
- ✓ Evacuate victims in a safe way.
- ✓ Know your own limitations

Additional Resources

1) Trinidad & Tobago video on Lifts & Carries.

UNIT 10

Shelter Management

IFRC

CaDRiM Reference Centre
Caribbean Disaster Risk Management

DOMINICA RED CROSS

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OBJECTIVES
In this unit you will learn about:

What is a shelter.

The types of shelters.

The Basic Considerations that Should be Provided by a Shelter.

How to opening an Alternative Shelter.

The Standards for Shelter Capacity.

The Rules of a Shelter.

Learn about the Challenges Faced by in Shelters.

Learn how to Close a Shelter or De-activate a Shelter

At the end of this unit, you should be able to:

- ✓ Select an appropriate structure for an alternative shelter.
- ✓ Prepare the shelter for use.
- ✓ Operate the shelter with available resources.
- ✓ Complete all tasks at closure.

10.0
Shelter Management

The national disaster office is usually responsible for the management of shelters. The NDO trains and appoints shelter managers to designated public buildings. However, communities may be cut off from access to the designated shelter and will have to improvise set up an alternate shelter in their neighborhood.

This section is designed to give you the information and background that you need in order to establish and facilitate an alternate emergency shelter in the absence of the authorities. Much of the material for this unit is taken from the USAID OFDA ***Shelters and Shelter Management Reference Guide*** **Rev. Mar 2003**

10.1
What Is A Shelter?

A shelter is a secure habitable covered living space providing **privacy** and **dignity** for those within it. Shelters should provide more than just relief. It should also provide protection from climate, ensure privacy and dignity and be a safe place. Shelters should also ensure resistance to ill health and spread of diseases, support family and community life after an emergency and provide communal coping strategies.

10.2

Shelter Models

Two types of shelter have been classified:

- **Single Host Shelters**: Shelter is provided at the homes of relatives, friends and neighbours.
- **Community Or Collective Shelter:** Buildings such as schools, churches, public buildings, camp sites can be used as shelters. Shelters can also be a temporary makeshift shelter such as a family tent or they can be transitional and are designed from materials that can transition into more permanent structures.

10.2.1

Single Host Shelters

These are provided by family and friend of those affected, as well as in communities where there are persons who can offer their homes to shelter individuals/families. It is important that CDRTs take these into consideration when evacuations are imposed by a sudden disaster or where evacuation is planned. Persons should identify possible host family shelters in their Family Emergency Plan.

Advantages Of Single Host Shelters	Disadvantages Of Single Host Shelters
- Living needs are available. - There are fewer organizational problems and health concerns. - It can be implemented in a timely manner.	- Generally, these are not identified during the evaluation of damage. - They can be overlooked for assistance. - The do not generate as much social pressure. It alters the lifestyle of the host family.

Shelterees should return to their homes and normal daily lives as soon as the immediate threat has passed, and authorities say it is safe to do so.

10.2.2

Community or Collective Shelters

This is offered in permanent facilities like community centers, schools, religious buildings, stadiums, public or private buildings, in buildings like shops provided to groups of families and individuals with damaged homes.

Advantages Of Community Shelters	Disadvantages Of Community Shelters
• Centrally located within the community. • In some cases it does not require much re-organization. • It is a focal point for aid delivery aid delivery.	• May not always be ideal as an emergency shelter. • The building and its surroundings may be dangerous. • Can result in major overcrowding and exert social pressure. • If the number of persons in the facility is large, there is usually limited privacy. • Occupation of the building as a shelter can result in damage to the facility and its resources and delay the restoration of this service.

10.3

Identifying A Community Shelter

Consult your national disaster office for a list of designated shelters in your community. If these designated shelters cannot be used, such as when the building and its surrounds were also affected by the disaster, there will be a need to identify alternative facilities. In those cases, **work with the authorities** to select and **obtain permission** for use of a suitable building.

Not all designated shelters are suitable for all hazard impacts. For example, some structures that may be suitable for protecting people from the impact of a hurricane may not be suitable for occupancy for more than two or three days. On the other hand, a structure that may not be suitable for hurricane protection, might be ideal for long-term occupancy by persons evacuated to avoid an event like a flood or volcano. It is therefore imperative that physical inspection be made, and the appropriateness of a shelter be determined.

It should be noted that the responsibility for use and administration of shelters is vested in the State – in some cases the central or municipal agrees with some organizations for the latter to manage shelters, but this usually implies that the government will support these organizations. **CDRTs should work with/through the local authority for shelter management.**

10.4
Opening a Shelter

10.4.1
Shelter Management Checklist

The following checklists are for use by the Shelter Manager in preparing for shelter activation once the needed approvals and permissions are obtained. Refer to the Shelter Manager's Guidelines for details of each task.

See form at end of unit.

Pre-activation

Prepare a management plan

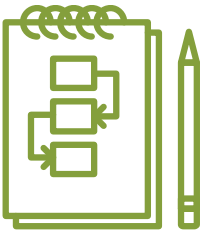
- ☐ Building inspected
- ☐ Determine and allocate spaces for shelterees
- ☐ Plan for obtaining, transporting, receiving and storing supplies
- ☐ Support team mobilised
- ☐ Establish and maintain contact with relevant response agencies & interest groups.
- ☐ Set up meetings to coordinate tasks with other CDRT members
- ☐ Meetings arranged with prospective shelterees
- ☐ Obtain all necessary forms
- ☐ Develop a list of shelterees needs and priorities

10.4.2

Shelter Management Guidelines

Pre-activation

The previously mentioned guidelines is provided to assist with the use of the Shelter Management checklist.

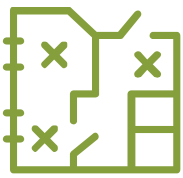


Prepare A Management Plan

This plan will give an overview of the entire shelter management operation from the preparation stage to the recovery stage. It will reflect the role and activities of the principal actors – management personnel and shelterees.

Building Inspected

Periodic checks should be made to ensure essential facilities and equipment are in place and functioning (running water, toilets, communication system, electricity, standby generator). Also check for defects in the building (loose bolts/nuts, connections, leaks, windows and doors). Ensure proper security; keys should be held in a place of safety and easily obtained.



Rooms Allocated

Determine and allocate space for shelterees according to square foot per person (**100 square feet per person**). Adequate room space should be provided for sleeping, dining, recreation storage, special needs, cooking, veterinary activities (pets) and other necessary activities. See floor plan exercises).

Receipt And Storage Of Supplies

A system should be devised for obtaining, transporting, receiving and storing of food and other supplies. Proper inventory and careful checking for expiration dates and defects in canned food items are very necessary.

Support Team Mobilised

Periodic contact with support team, especially before the hurricane season, is very necessary to update them on their roles.

Relevant Authorities Contacted

It is extremely important to be in constant contact with the appropriate authorities such as NGO's, PVO's, CSM, the Red Cross, EOC and other relevant government departments and agencies.

Meetings Held

Meetings are necessary to coordinate task. For example, prepare lists of potentially vulnerable families for the shelter; draw up rules and regulations for shelterees; prepare activities and equipment for the shelter and enlist the support of the shelterees in managing the shelter.

Meetings Held With Shelterees

It is necessary to communicate with shelterees before a disaster occurs. Helpful information on rules, regulations and other pertinent matters could be provided so that the shelterees would be better prepared to use the shelter.

Shelter Prepared

All necessary tasks have been completed to prepare the shelter for occupancy.

Activity:

What are some of the basic needs that a shelter should provide?

Resource For This Activity:

The Sphere Handbook 2018 : The Sphere Handbook 2018 | Sphere (spherestandards.org)

The basic needs would be further discussed in Section 10.3.3 Standards for Shelter Capacity.

10.4.3

Standards For Shelter Capacity

Shelters are places of refuge and must not endanger any of the occupants. Care must be taken to minimize overcrowding and occurrences of unhealthy environments. The following guidelines are provided to ensure basic levels of comfort and safety:

Sleeping Accommodation

- ✓ The occupancy load for the building and each floor should be obtained and must never be exceeded.
- ✓ Minimum floor space of 3.5 sq. metres (110 sq. ft.) per person.
- ✓ Minimum distance of 75 cm (2.5 ft.) between beds. The number of persons to be supported by the shelter must be determined from the occupancy load and the minimum floor space.
- ✓ Minimum of 1 blanket and bedding (floormat, mattress cot etc.) per person.
- ✓ Ensure COVID-19 social distancing protocols are observed.

Washing Facilities

- ✓ Privies for male and female must be separate.
- ✓ 1 toilet per 20 shelterees with separate toilets for males and females.
- ✓ Toilets should be at a maximum distance of 50 m (150 ft.) from building.
- ✓ One (1) hand wash basin per 10 persons.
- ✓ One (1) shower per 30 persons.
- ✓ Local public health authority requirements may be more stringent and would therefore supersede these guidelines.
- ✓ Ensure accessibility of washing facilities to persons with disabilities.

Water Requirements (Per Day)

- ✓ 2.5 – 3 litres per person per day for drinking.
- ✓ 2- 6 litres per person per day for hygiene practices.
- ✓ Minimum of 15 litres per person per day.

Food & Nutrition Requirements

- ✓ Designate a proper staging and storage area for meals.
- ✓ If food is being cooked on site, ensure there is a clean kitchen or designate a suitable area where meals can be prepared.
- ✓ Consider dietary restrictions.

Health & Sanitation

- ✓ Access to hygiene products including menstrual and incontinence products.
- ✓ Access to mosquito nets where needed.
- ✓ Establish a private area where shelterees can access psychosocial and mental health support and medical services.
- ✓ Access to hand sanitizer and face masks.
- ✓ Ensure all COVID-19 health protocols are followed.

10.5
Shelter Rules

All existing laws of the country remain enforced at shelters.

The following are some additional rules that should be obeyed by shelteress:

Fire & Safety

1. No dangerous weapons, liquids, or other safety hazards shall be kept by shelterees.
2. Smoking will be permitted only in designated areas.
3. No alcoholic beverages will be consumed within the shelter area.
4. No drugs are allowed.

Health & Sanitation

1. Shelter floors and yard area shall be kept clean and swept free of waste materials.
2. Sleeping areas shall be kept clean and tidy at all times.
3. Dispose of solid waste containers in designated areas and ensure proper disposal of these often.
4. Ensure water is available to maintain hygiene (bathing, laundering and toilet duties, etc.).
5. Maintain a distance of 6 feet between you and persons who are not in your immediate family.
6. Bathroom and washing facilities should be kept clean.

Other Rules

1. No livestock (some shelters may allow pets to be kept outside).
2. No loud music.
3. No boisterous or discourteous behaviour.
4. Shelterees leaving the shelter for any period of time must sign out and in at the registration area.
5. No not leave children unattended and keep track of children.

10.6

Shelteree Needs

In addition to providing a safe place for temporarily displaced persons, shelter managers should consider the following needs of shelterees:

Physical – Shelter residents need as much privacy as possible at the shelter. Family units will not want to be in separate rooms. Sanitation facilities should be adequate. The meeting area should be spacious enough to permit a fair degree of freedom of movement.

Social – Families will be anxious to maintain their interpersonal relationship links. There will be general desire for social interaction among the shelter population.

Information – Shelter residents will want to be able to communicate with relatives and friends while in the shelter. The shelter manager will need to brief the shelter residents on the latest information on the disaster and relevant situation reports as they become available.

Self Esteem – Shelter occupants will want to maintain their self-respect. They will expect to be treated with respect and not considered as unimportant. Many will want to be a part of the shelter operations activities.

Recreation – Physical exercises will serve as a therapy for those who may be stressed, worried, frustrated, tense or bored. Activities must be geared towards relieving these emotions.

Emotional – There will be a need to deal with shelterees feelings of fear, anger and depression. There may be a need for counselling and support groups. Professionals in the field should be used to help with this need.

Spiritual – Opportunities should be provided for religious activities as one's religion may provide a strong support mechanism. Outside support may be needed.

Cultural –The shelteree will want to maintain his/her cultural patterns of food, dress, music and relationships while in the shelter.

10.7
Challenges Faced In Shelters

1) Privacy – Families, women and girls need privacy. Arrangements should be made to offer privacy and protection to these persons. Some uninhibited shelterees have engaged in sexual acts in the presence of other shelterees therefore codes of conduct and enforcement arrangements are necessary in shelters.

2) Reluctance To Leave – Shelterees who benefit from public and private goodwill are sometimes reluctant to leave but arrangements/encouragement for closing the shelters are necessary.

3) Fear Of Discrimination - Illegal immigrants and migrants often live in marginal areas prone to hazard impact and will need collective shelters. Unfortunately they may be reluctant to use these facilities due to discrimination, abuse or fear of deportation. In an emergency the most vulnerable must be protected.

4) No Shelter Recovery Policy For The Landless - National policies on shelter and recovery often omit the landless and socially outcast. Arrangements for these shelterees are slow in coming.

5) Indigent & Poor Have Little Resources - National shelter policy often requires the shelterees to bring resources to the location. The indigent & poor have few resources to bring to the shelter. Some prefer to avoid the safety of shelter rather than face the humiliation arriving without resources.

6) Security – Special arrangements are needed to protect those vulnerable to discrimination, abuse and harassment. It's important that shelters provide a safe space for children and vulnerable groups. Security should also be provided against the presence of illegal drugs and weapons.

7) Water & Sanitation – May buildings used as shelters are not usually equipped for occupation for more than a day. Special arrangements for water and sanitation are required for the operation of shelters.

8) Food - Shelterees may often not have food for the duration and this need arranged. Long-term sheltering, for example in the case of a volcanic eruption, require special arrangements to give privacy to families and encourage self sufficiency.

9) Livestock & Animals – Shelters often prohibit these. But livestock represent wealth and persons at risk are reluctant to move away from their animals. Families have attachments to pets which if abandoned can result in psychological damage. Special arrangements should be made for animals when shelters are in operation.

10) Socially Displaced – Unfortunately shelters can be a dumping ground for relatives wanting to have someone else care for older or infirm relatives. Homeless persons and persons with mental illnesses often end up in shelters. These persons may require special medical care.

10.8
Reporting Shelter Activities

A shelter log is imperative for tracking the activities and the actions taken at the shelter. A notebook can be used as the shelter log and should be kept in the office or designated area. Use the shelter log to document problems, solutions and other important information throughout the shelter operation. Be sure all volunteer workers are aware of the log so they can contribute to it.

- Prepare and provide statistics on the number of shelter residents, as required by the government and aid agencies.
- Requirements for reporting population could change over the course of a relief operation.

10.9
Shelter Monitoring (re-inspection)

Although the government is responsible for the inspection of shelters, it may become necessary for the CDRTs, **with the permission of the owners,** to open a building in the community which is not on the official list. In such a circumstance the CDRT will need to inform the authorities. This section (usually for re-inspection of officially designated buildings) offers a brief checklist, as well as the guidelines for assessing in impromptu situations.

10.9.1

Shelter Re-inspection Checklist

Shelter: Location:
Inspector: Date:

SHELTER RE-INSPECTION CHECKLIST

The following checklist is for use in conducting a periodic re-inspection of a building and its site for continued use as an emergency shelter.

Refer to the guidelines for specific information about each item.

1. Building location (site)	Yes	No
1.1 Is accessibility easy?	❑	❑
1.2 Is parking space adequate?	❑	❑
1.3 Is building threatened by mudslides or landslides?	❑	❑
1.4 Is building threatened by falling trees, boulders, power lines or flying debris?	❑	❑
1.5 Is building located close to the source of any potential hazardous materials?	❑	❑
1.6 Is building threatened by a dam or reservoir failure?	❑	❑
2. Building structure		
2.1 Are two entrances and exits available?	❑	❑
2.2 Are walls generally in good condition and free of large cracks?	❑	❑
2.3 Are windows and glass doors protected by shutters?	❑	❑
2.4 Are frames properly affixed to walls?	❑	❑
2.5 Is roof free of leaks and secure?	❑	❑
2.6 Are building contents adequate and secure?	❑	❑
3. Amenities and services		
3.1 Is there power supply (Mains)?	❑	❑
3.2 Is there stand-by power supply?	❑	❑
3.3 Is the water system functional?	❑	❑
3.4 Are there laundry facilities?	❑	❑
3.5 Are sanitary facilities functional?	❑	❑
3.6 Is septic system functioning well?	❑	❑
3.7 Are kitchen facilities functional?	❑	❑
3.8 Is food storage area clean?	❑	❑
3.9 Is shelter area free of refuse and garbage?	❑	❑
3.10 Is shelter area free of mosquitoes and pests?	❑	❑

10.10

Closing Shelters

Successful shelters create a sense of calm, security, routine and predictability. Closing the shelter may cause some negative feelings as it disrupts the routine and predictability residents have come to expect. Accurate, complete and consistent communication with shelter volunteers, residents and the community will mitigate the negative impacts of closing a shelter.

Prior to closing the shelter, keep the following items in mind:

- Communicate all plans with the government, aid agencies and community partners well in advance of the actual closing.
- Identify other shelter facilities in case the current shelter has to be closed e.g. schools.
- Communicate the confirmed shelter closing date to shelter residents. Only give out confirmed statements. Do not communicate speculative information, such as planning information.

SHELTER MANAGER CHECKLIST
De-activation/Post-activation

Evacuation of Shelter Completed

1. Rehabilitation arrangements completed for shelterees ☐
2. Necessary transportation arranged ☐
3. Shelterees signed out ☐

Administrative details completed

1. Volunteer staff debriefed ☐
2. All forms completed (Registrations, requisitions, inventories) ☐
3. Activity log completed ☐
4. Final reports written ☐

Shelter building cleaned and restored

1. Remaining supplies and equipment returned ☐
2. Shelter inspected ☐
3. Damage to structure repaired/reported ☐
4. Shelter cleaned ☐

Keys returned ☐

10.11

Education/Awareness

As mentioned in Unit 2, CDRTs will be responsible for educating the community about the basics of disaster risk reduction which will help to increase the overall resilience of the community.

CDRTs are encouraged to make community members aware of the following as it relates to shelters:.

Encourage community members to learn the location of the shelters.

Educate the community about putting together a “grab and go” bag that can be taken with them to a shelter which includes a valid form of identification.

Educate community members about the rules and regulations that should be followed at a shelter.

Identify high risk families/individuals and review this information with them.

Maintain periodic contact with other CDRT members to review roles and responsibilities

You should now be able to:

- ✓ Select an appropriate structure for an alternate shelter.
- ✓ Prepare Shelter for use.
- ✓ Operate the shelter with available resources.
- ✓ Complete all tasks at closures

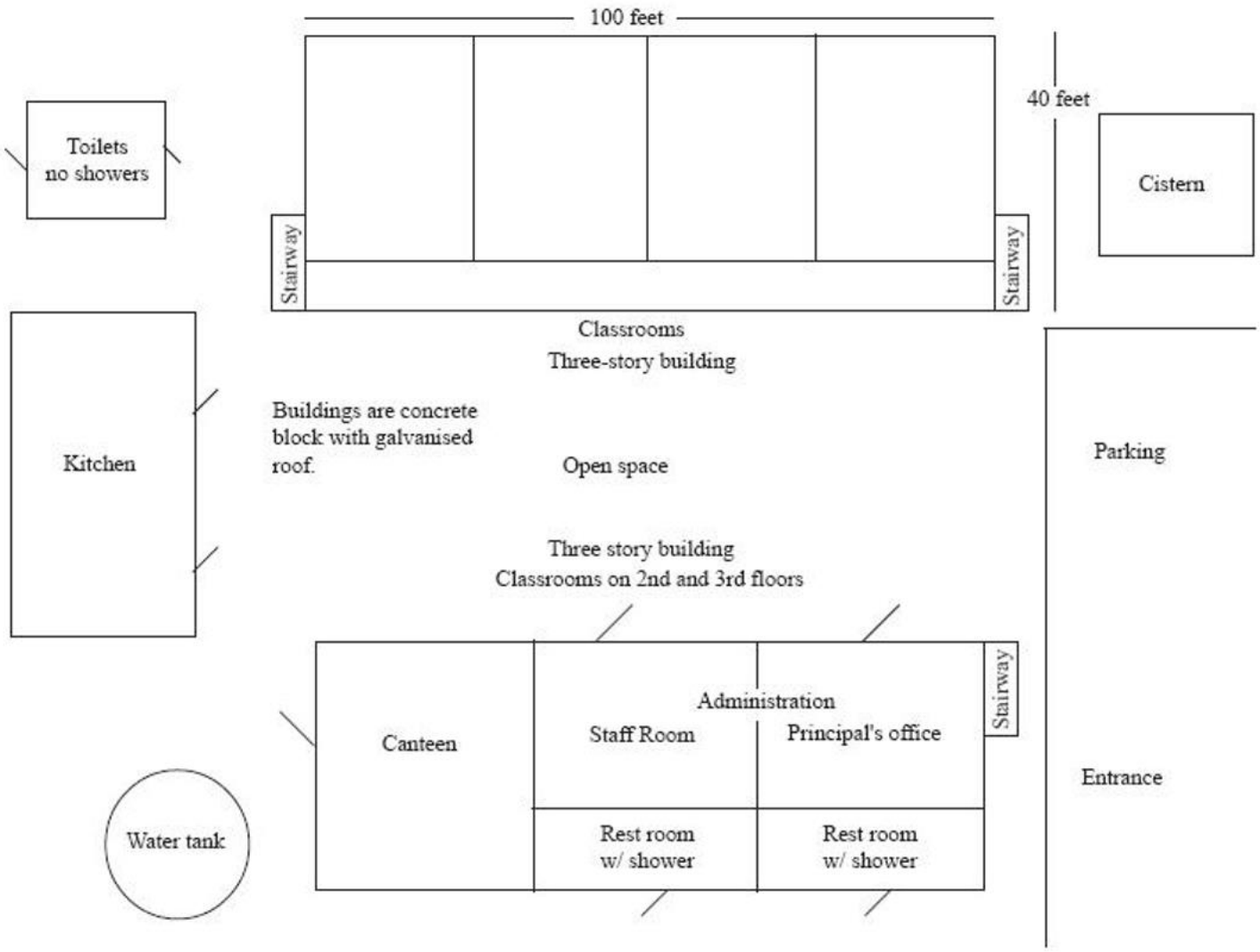
Additional Resources

1) IFRC Rapid Shelter Solution: Family Tent: 208600-Shelter instruction flyer-EN-HR.pdf (ifrc.org)
2) IFRC What we do in Shelter: What we do in shelter - IFRC
3) USAID Shelters and Management Reference Guide: Shelters and Shelter Management Reference Guide (usaid.gov)
4) PAHO Caribbean Shelter Guide COVID-19 Considerations: https://www.paho.org/en/documents/caribbean-shelter-guide-covid-19-considerations

Note to CDRTs: As mentioned previously, temporary makeshift shelters (tents) might be needed in dire situations. Please use the IFRC Rapid Shelter Solution Guide to learn more on how to erect a family tent which can be used as a shelter temporarily.

Activity: Use what you've learnt to work as a group to develop a shelter management plan.

Appendix 1:
Shelter Floor Plan Diagrams



Important: *Identify an area to be used as a medical post or a space to isolate persons who arrive at the shelter with flu-like symptoms.*