



Hawaii Hazards Awareness & Resilience Program

Produced by
Hawaii State Civil Defense



HAWAII HAZARDS AWARENESS & RESILIENCE PROGRAM:

GOAL: To enhance community resilience to multiple hazards through a facilitated education and outreach program that promotes hazard understanding and awareness, and offers tools and information resources to guide mitigation, preparedness, response and recovery.

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PART 3: UNDERSTANDING VULNERABILITY AND CAPACITY

Module 5: Risk Assessment

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- Describing the Components of Disaster
- Understanding Vulnerability and Capacity
 - Vulnerability
 - Coping Capacity
- Developing a Community Profile

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Module 5: Risk Assessment

DESCRIBING THE COMPONENTS OF DISASTER

Introduction

- The broad goal of most risk and vulnerability assessments is to better understand, represent and explain impacts of disasters in order to reduce suffering and loss.
- Exposure, vulnerability and coping capacity are components of (and help us describe) disaster risk.
- The exact methods of combining these components in a risk assessment is less important than gathering the right information and understanding what you want to do with it.

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Describing the Components of Disaster: *Exposure*

Exposure

People, property, systems, or other elements present in hazard zones that are thereby subject to potential losses.

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Describing the Components of Disaster: *Vulnerability*

Vulnerability

The characteristics and circumstances of a community, system or asset that make it susceptible to the damaging effects of a hazard.

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Describing the Components of Disaster: *Coping Capacity*

Coping Capacity

The ability of people, organizations and systems, using available skills and resources, to face and manage adverse conditions, emergencies or disasters

Module 5: Risk Assessment

UNDERSTANDING VULNERABILITY AND CAPACITY

Understanding Vulnerability and Capacity

- Traditionally, vulnerability has been associated with design standards and the ability of physical structures like bridges and buildings to withstand physical forces.
- The concept of vulnerability has evolved to include the factors that increase the susceptibility of people, communities, systems and other kinds of assets to disaster impacts.

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Understanding Vulnerability

- Risk assessments help us identify the conditions or characteristics of the human-environment system that make it more susceptible, or vulnerable to the impacts of natural hazards.
- For example:
 - Economic conditions, at individual, head of household, local, regional and national levels can strongly influence the level of vulnerability.

Understanding Vulnerability

- The level of access to critical and basic socio-economic infrastructure affects a community's susceptibility to harmful impacts.
 - For example:
 - Communication networks
 - Utilities and supplies
 - Transportation
 - Water
 - Sanitation
 - Health care services

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Understanding Vulnerability

- People who are in poor health, or have disabilities may have mobility issues during an evacuation.
- Dependent populations such as the very young and elderly are often more susceptible to hazard impacts.
- Recent immigrants, or marginalized populations may not have access to, or understanding of local warning messages.

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Understanding Vulnerability

- Physical factors influencing the vulnerability of the built environment include:
 - Poor design and construction
 - Age and quality of materials
 - Location in hazard-prone areas

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Understanding Vulnerability

- Natural resource depletion, loss of biodiversity and environmental degradation can put livelihoods in jeopardy.
- Water stress and soil degradation coupled with poor management and agricultural practices can limit access to clean water and threaten food security.
- Pollution reduces access to clean water and air and increases the likelihood of health problems.

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Group Activity


What Vulnerabilities Do You See?

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 **Discussion**

1. What conditions in your community increase or decrease your vulnerability?

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Understanding Coping Capacity

- People and communities that are susceptible to the impacts of hazards need not be thought of solely as victims without the ability to cope.
- During the Risk Assessment process it is important to identify local strengths and partnerships that can improve disaster preparedness and response, and increase coping capacities that can reduce disaster risk and build community resilience.

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Understanding Coping Capacity
(Continued)

- Coping capacities have been recognized as key elements in reducing disaster impacts.
- Good governance, financial reserves, insurance, transportation and communication networks, and effective health services increase the ability of households and communities to handle adversity.
- Preparedness plans, and well-trained and well-equipped disaster response personnel also increase coping capacity.

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Understanding Coping Capacity
(Continued)


- Other examples:
 - Assessing risk and vulnerability
 - Evacuation planning
 - Drills and exercises
 - Family preparedness plans
 - Disaster supply kits
 - Community outreach and education events

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Understanding Vulnerability and Capacity

- The conditions within which communities, assets, and resources exist are driven by environmental, social and economic processes operating at multiple scales.
- These conditions may increase or decrease susceptibility to impact and/or the ability to cope.
- By addressing the driving factors behind these conditions, vulnerability can be reduced and/or coping capacity can be increased.
- In this way, the likelihood of disaster impacts is reduced, along with overall risk.

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Discussion

1. What coping capacities exist in your community?
2. Can you think of processes or conditions that could further enhance the coping capacity of your community?

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Module 5: Risk Assessment

DEVELOPING A COMMUNITY PROFILE

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Developing a Community Profile

- A Community Profile assists you in identifying key infrastructure, systems and resources that can support your community's disaster preparedness, response and recovery activities.
- It will also help you to identify vulnerabilities and coping capacities.
- You will find that the information collected in *Module 4: Community Resource Mapping* will help you in developing the Community Profile.


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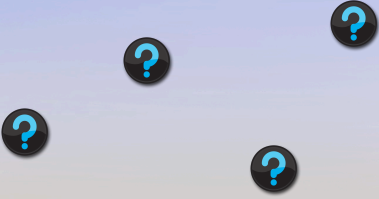
Group Activity

Worksheet 3: Community Profile

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Questions?



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MAHALO

The Hawaii Hazards Awareness & Resilience Program (HHARP) is the result of a collaborative partnership between Hawaii State Civil Defense and the Pacific Disaster Center.

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