



NP22: DISASTER NURSING AND EMERGENCY PREPAREDNESS

CMCC | Prof. Vanessa M. Aviles RN | SY: 2025 - 2026 (2nd Sem.) | Lesson 1 (Prelim)

DISASTER

- is defined as "a serious disruption of the functioning of a community or a society at any scale due to hazardous events interacting with conditions of exposure, vulnerability and capacity, leading to one or more of the following: *human material, economic and environmental losses and impacts.*

★ Any **DISASTER** will cause a tremendous impact to human life, material, economic, and environment losses and impacts.

- **According to WHO: NATURAL DISASTER** as the result of an ecological disruption or threat that exceeds the adjustment capacity of the affected community (Lechat 1979).

★ **ECOLOGICAL** - human and the surrounding environment.

★ **MAJOR DISASTER** - will need help from external forces.

☞ ex. "The Big One" in Metro Manila will receive help from Region 1 or other countries.

CONCEPTS AND TYPES OF DISASTER

A. CLASSIFICATION OF NATURAL DISASTER

1. **GEOPHYSICAL** - occurs as a force of nature (also known as **natural processes**) : stems from the Earth's crust.

↳ Moving of tectonic plates.

★ **GEO** - greek word "earth"

★ **PHYSICAL** - matter and energy

ex. earthquakes, volcanic eruptions, landslide

↳ Involvement of major tectonic plate movement

↳ Activity occur beneath the Earth crust

2. **METEOROLOGICAL** - atmospheric caused by weather conditions violence but short-lived events.

↳ Quick/sudden

★ **ONSET**: Sudden

ex. *typhoons, tornadoes.*

3. **CLIMATOLOGICAL** - is caused by extreme climate patterns and can cause persistent negative impact on multiple sectors on people's lives.

★ also known as extreme climate patterns (shifting from extreme warm to extreme coldness).

★ **ONSET**: Gradual

ex. forest fire, drought, *El Niño*

↳ Caused by unusual warming of the surface water in the Pacific.

↳ On set is **gradual**.

↳ **Affected**: Farmers

★ **La Niña** - caused by extreme coolness.

4. **HYDROLOGICAL** - stem from atmospheric, oceanographic or hydrological processes leading to loss of lives, property damage and disruption.

ex. *flashfloods (due to obstructive drainages), tsunamis*

5. **BIOLOGICAL** - are events that involve the rapid incidence and prevalence of vector-driven diseases, toxins or pathogens.

★ **Virus, Bacteria** can be present that can be trigger by nature

ex. *Epidemic, pandemic, COVID-19*

↳ Virus from nature

★ **CASCADING DISASTER**

- chain of events/reaction

- from 1 disaster to another disaster

B. INTERNAL VS EXTERNAL DISASTERS

1. INTERNAL DISASTER

- Cause disruption of normal hospital function due to injuries or deaths of hospital personnel or damage to the facility itself. (Hendrikson & Horowitz, 2016)

- ex. *hospital fire, power failure or chemical spill.*

★ can cause interruption of quality care for the patients.

★ **HEAD COUNT** is **IMPORTANT** especially if the patient is to be **EVACUATED**.

2. EXTERNAL DISASTER

- Is major emergency occurring outside a facility (like hospital or business) that overwhelms local resources.

- ex. *Earthquake, flood, blizzard (snow storm); Typhoon Ondoy yr. 2009 which caused extensive flooding in Metro Manila.*

★ If there is an **EXTERNAL DISASTER** there will be **INTERNAL DISASTER**

C. MAN-MADE DISASTER

- **"Anthropogenic"** - in which the principal direct causes are identifiable human actions; deliberate.

↳ intentional

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1. TERRORISM

- Are acts that are intended to:
 - To intimidate or coerce civilians
 - ↳ to compel to an act or choice
 - ↳ Introduce fear to the people
 - Influence government policy by coercion
 - Affect the conduct of a government by mass destruction, assassination or kidnapping.

TRIANGULISM COERCE

- a. Attacker/Terrorist
- b. Victim
- c. Audience/Civillian

2. TECHNOLOGICAL DISASTER

- Where a large number of people, property, community, infrastructure and economic welfare and directly and adversely affected by major industrial accidents, unplanned release of nuclear energy and fires or explosions from hazardous substances such as fuels, chemicals or nuclear materials.

★ Unintentional / Accidental

- ex. *Chemical or oil spill: can cause harm to the health of the people (by ingestion of affected fish or inhalation) and underwater creatures (e.g. fish).*

3. TRANSITIONAL HUMAN SHELTERS

- Provide temporary housing with support services, bridging the gap between immediate emergency shelters and experiencing homelessness, offering more stability (months to years) like job training, counselling, and education, permanent homes, often disaster survivors or people.

- ★ **GOAL:** Transition of the survivors from temporary or immediate shelters to permanent shelters.
- ★ **FOCUS:** Long-term independence of the survivors by providing job training or seminars (livelihood programs) and psychological counseling.

TRENDS AND PATTERNS OF DISASTERS

Disasters are frequently categorized based on their onset, impact and duration. Ex. *Earthquakes, typhoons*, where in the onset is abrupt, but creates strong impact on people and community. Disasters trends show an overall increase in frequency especially climate-related ones, storms, floods, extreme heat driven by climate change, population growth in vulnerable areas and better reporting though deaths are decreasing due to improved warnings.

★ **IMPROVED WARNING** through the contingency plans created by the NDRRMC to lessen the impact of the disaster.

KEY PATTERNS

GEOGRAPHIC CONCENTRATION

Asia experience with the most disasters, death and injuries. ([sciencedirect.com](https://www.sciencedirect.com))

Due to:

A. HIGH EXPOSURE TO NATURAL HAZARDS

- **Geological Instability** - southeast Asia sits on the **PACIFIC RING OF FIRE**.
- **Typhoon Belt** - warm ocean waters.
 - ↳ Intensify typhoon formation

B. ACCELERATING CLIMATE CHANGE

- Rapid warming
- **Increased Casualties** - fatalities due to landslides

C. HIGH POPULATION DENSITY AND URBANIZATION

- **Crowded Cities** - unplanned urbanization and settlement to badly constructed cities.
- **Vulnerable Settlements** - low-income populations often reside in informal settlements (squatter area).
- **Causes: UNEMPLOYED**

D. LIMITED COPING AND ADAPTIVE CAPACITIES

- **Lack of Infrastructure** - lack of long-term adaptive strategies and insufficient coping mechanisms (ex. *Philippines and Indonesia accdgd. to World Risk Report 2024*)

★ Due to corruption

- **Early Warning Gaps** - some communities do not receive early warnings.

★ Especially in remote areas

E. ENVIRONMENTAL DEGRADATION

- **Deforestation** - widespread logging



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PHASES OF DISASTER

The life cycle of disaster is generally referred to as the “**disaster continuum**” or “**emergency management cycle**”. The basic phases or “**life cycle**” of a disaster management program include “**preparedness, mitigation, response, recovery and evaluation**” (Kim Proctor & Amos, 2002; Landesman, 2011; Landesman & Morrow, 2013).

1. **PRE-DISASTER** - refers to the **crucial phase** before a disaster strikes, focusing on **preparedness, mitigation, planning** and **risk reduction**, to minimize potential losses.
2. **WARNING** - also known as “**forecasting**”. Refers to monitoring events to look for indicators that predict the location, timing and magnitude of future disasters.
3. **SOCIAL IMPACT** - leading to negative psychological, demographic economic, community and behavioral effects.

★ **DUE: Trauma and Psychological Effect**

4. **PHYSICAL IMPACT** - includes immediate deaths, injuries (trauma, burns, infections) and destructions of buildings.
5. **EMERGENCY** - is also known as “**response phase**” is the **immediate aftermath** of a disaster, focusing on saving lives, meeting basic human needs through actions such as search and rescue operations, providing first aid, coordinating resources (personnel, supplies); establishing command centers and issuing warnings.

★ **FRONT: AFP (Armed Forces of the Philippines), BFP (Bureau of Fire Protection), Foundation (e.g. GMA Foundation)/LGUs** - they conduct search and rescue operations, medical missions, relief goods.

6. **RESCUE** - is the immediate aftermath of a disaster, focused on saving lives, providing urgent medical aid.

★ As a **RESPONDER** you have to make sure that you are **SAFE**

7. **RECOVERY** - includes debris removal, rebuilding infrastructure, restoring essential services and mental health support.

★ Provide mental counselling.

★ Survivors may develop PTSD (Post-Traumatic Stress Disorder)

★ **HELP** survivors to **ADAPT TO CHANGE**