



University of the Philippines Manila
THE HEALTH SCIENCES CENTER
College of Nursing

WHO Collaborating Center for Nursing Leadership and Development
CHED Center of Excellence for Nursing Education
JV Sotejo Hall, Pedro Gil St., Ermita, Manila



DISASTER NURSING (N110)
STUDY GUIDE

Week 6: DISASTER RISK REDUCTION (DRR) Part 2

Introduction

During the first 5 weeks of N110, you learned about the critical concepts, frameworks, and organizational structures related to disaster risk reduction and management in the Philippines. By this time, you are now familiar with the different competencies, roles, and responsibilities of the nurse with respect to the different phases of the disaster continuum.

From this point onwards, you will now learn more about essential nursing interventions related to the pre-impact/incident phase.

Learning Outcomes

After studying this topic, you should be able to:

1. Describe essential nursing interventions related to disaster prevention and mitigation
2. Describe essential nursing interventions related to disaster preparedness
3. Familiarize with the different disaster preparedness plans

DISASTER PREVENTION AND MITIGATION

In whole, **disaster prevention, mitigation, and preparedness focus on capacity building and pre-impact/incident activities**, with the **goal of preparing to manage the crisis**.

According to the Philippine DRRM Act of 2010 (RA No. 10121), **disaster prevention** is the **outright avoidance of adverse impacts of hazards and related disasters**. It expresses the intention to completely avoid potential adverse impacts through advance actions such as construction of dams or embankments to eliminate flood risks, land use regulations deterring human settlement in high risk zones, and seismic engineering designs that ensure the survival and function of critical buildings in case of earthquakes.

On the other hand, **disaster mitigation** is the **lessening or limitation of the adverse impacts of hazards and related disasters**. Mitigation consist of structural and non-structural measures, which include, but are not limited to hazard-resistant construction and engineering works, the formulation and implementation of plans, programs, projects and activities, awareness raising, knowledge management, policies on land use and resource management as well as the enforcement of comprehensive land use planning, building and safety standards and legislation.

In the context of health and nursing, prevention and mitigation efforts in general focus on identifying risks, reducing vulnerabilities and exposure, and enhancing capacities of communities (WHO & ICN, 2009).

There are **five (5) areas** where the nurse can focus efforts on **disaster prevention and mitigation**:

1. **Early Warning Systems (EWS)**
2. **Immunization**
3. **Nutrition and Food Security**
4. **Water, Sanitation and Hygiene (WASH)**
5. **Control and Surveillance of Endemic Diseases**

The nurse should provide attention to these five areas or aspects to **ensure individuals, families, population groups, and communities have improved health and nutritional status** (Bonito & Minami, 2017) and can **cope with disasters and emergencies**.

Early Warning Systems

An early warning system (EWS) is a tool consisting of communication equipment and systems that empowers individuals and communities to prepare, respond and protect themselves, their properties and their environments appropriately and timely during a disaster (CCS, MaCEC & SAC Northern Quezon, 2011). A **good disaster risk assessment provides the essential information needed to develop an effective early warning system**. The EWS is usually developed based on the **hazards** occurring in the area, their frequency, and the degree of **local exposure and vulnerability of the community** to each hazard.

The **elements of EWS** include: (1) good knowledge of risks and prediction of potentially catastrophic events, (2) dissemination and acceptance of a warning system, (3) capabilities of the community for developing and carrying out the appropriate response to the warnings received (de Leon et al as cited in CCS, MaCEC & SAC Northern Quezon, 2011).

The **requirements for establishing an EWS** include **hardware** such as hazard monitoring equipment, redundant communication equipment, and warning devices; while **software** such as the warning system, protocol or release of warnings and instructions to communities; and information, education, and communication (IEC) campaign on EWS are also needed (CCS, MaCEC & SAC Northern Quezon, 2011).



Figure 1. A trained barangay volunteer shows how to use the manual rain gauge in Saint Bernard, Southern Leyte (ACCORD, 2015)



Figure 2. Another barangay volunteer shows how to use the PHIVOLCS landslide sensor in Saint Bernard, Southern Leyte (ACCORD, 2015)

However, for an **effective and sustainable early warning system**, the **people must have sufficient knowledge of hazards and their effects to which they are exposed; the capacity to understand warning information and system, the ability to monitor, analyze, and forecast disasters; and trust and confidence in the established EWS** (Benfield Hazard Research Centre as cited in CCS, MaCEC & SAC Northern Quezon, 2011).

Collaboration and participation of all actors from the barangay to national levels in developing and implementing EWS is critical – from identification of hazards to community response (CCS, MaCEC & SAC Northern Quezon, 2011). The **nurse in the community, hospital, workplace or any other setting should be familiar with the early warning system** so as to help people prepare, respond, and protect themselves when disasters or emergencies occur.

Deepening Your Understanding

Community-based Early Warning System and Evacuation

To learn more how participatory risk assessment and DRRM planning were used to develop a community-based early warning system, check these out:

- ACCORD (2019, February 21). Community-based early warning system: Saint Bernard, Southern Leyte. <https://youtu.be/Rg4Me1GYxtQ>
- Asian Disaster Preparedness Center (2008). Community-based early warning system and evacuation: Planning, development and testing. Protecting people's lives and properties from flood risks in Dagupan City, Philippines. https://www.preventionweb.net/files/8842_ADPCsafercities20.pdf

DO NOT DISTRIBUTE

Immunization

Child and adult immunizations are part of public health measures to reduce morbidity and mortality from vaccine-preventable diseases such as measles, mumps, chickenpox, polio, hepatitis, influenza, and pneumonia, among many others. Herd immunity, also known as population or community immunity, is the indirect protection from infectious disease that occurs when a population is immune through vaccination or previous infection (WHO, 2020).

Herd immunity is important because it keeps the spread of infectious or communicable diseases under control. When immunization rates are low (i.e. ratio of people vaccinated vs. total target population to be vaccinated is low), a disease outbreak can occur which can escalate into an epidemic if not mitigated. Therefore, the nurse must ensure that the target population are immunized according to the recommended age, dose, and schedule, and that a large portion of the community is vaccinated (i.e. high immunization rate or coverage) to develop and maintain herd immunity.



Figure 3. A public health nurse from Marikina City Health Office administers COVID-19 vaccine to an 81-year old elderly (Reuters/Eloisa Lopez, 2021)



Figure 4. A public health nurse administers a routine vaccine to an infant in 2019 (UNICEF Philippines/Shehzad Noorani, 2021)

Deepening Your Understanding

Chikiting Ligtas Campaign

To learn more how immunization is important during COVID-19 pandemic particularly among vulnerable groups such as children, check the video of Nurse JL from Aklan Provincial Health Office:

- UNLEASH by PHO Ilocos Sur (2021, February 12). UNLEASH Speaks #4: Public health nurses from the Philippines talk about public health and COVID-19.
<https://youtu.be/1Xmr5gAuhAI?t=671>

Nutrition and Food Security

People's survival is dependent on sustained access to food and maintenance of adequate nutrition (Powers & Daily, 2010). In disasters and emergencies, food supply is often interrupted. Food aid programs are usually short-term and target specific population groups, and may be inadequately distributed due to challenging circumstances (e.g. damaged or destroyed food stores or deliveries, stolen, sold or diverted) (ibid). Food shortage and severe nutritional deficiencies can occur particularly in vulnerable populations such as infants, children, breastfeeding mothers, and elderly (Veneema, 2019). Poor nutritional status also increases the susceptibility of individuals to various illnesses, whether in regular times or during disasters.

Hence, ensuring continuous availability and access of the people to sufficient, safe, and nutritious food should be one of the critical priorities of the nurse, in partnership with the different stakeholders and sectors such as agriculture and social welfare.



Figure 5. Nurse Rhoj, who works for an NGO, measures an infant's mid-upper arm circumference (MUAC) to identify malnourished 0-59 months children in Brgy. NBBN, Navotas City (Save the Children Philippines, 2016)



Figure 6. Nurse Rhoj also provides health education for breastfeeding, proper infant and young child nutrition, and child care for parents in Brgy. NBBN, Navotas City (Save the Children Philippines, 2016)

Water, Sanitation and Hygiene

Water, sanitation, and hygiene (WASH) refers to the provision of safe water for drinking, washing, and domestic activities, the safe removal and final disposal of waste, and health promotion activities to encourage protective healthy behaviors in the population or community (WHO, 2017). Whether in regular or emergency situations, WASH is essential to protect health and prevent disease outbreaks.

In collaboration with the local government and communities, nurses participate in designing, building, and maintaining water and sanitation systems to withstand the risks of disasters (ibid). This will also ensure health facilities and health care providers have adequate water supply to support delivery of life-saving and quality health care, infection prevention, and hygiene promotion in disasters and emergencies (ibid).



Figure 7. The municipal mayor, wife of mayor, municipal administrator, municipal engineer, municipal health officer and RHU nurse received additional handwashing stations donated by UNCHR (UNCHR, 2020). Maguindanao residents displaced due to magnitude 6.3 and 6.6 earthquakes were received by LGU Makilala, North Cotabato and housed in nine temporary evacuation centers since October 2019. Because of the additional population and threat of COVID-19, the LGU needed more handwashing stations installed in four barangays.

Control and Surveillance of Endemic Diseases

Endemic diseases refers to diseases that are constantly present or usually prevalent in a population within a geographic area or community (US CDC, 2012). Endemic diseases in the Philippines include communicable diseases such as influenza, dengue, malaria, among others – and non-communicable diseases such as hypertension and diabetes.

When there is a sudden increase in the number of cases of a disease above what is normally expected in the population in a specific area, an **outbreak** occurs. An **epidemic** covers a wider area and population, while a **pandemic** refers to an epidemic that has spread over multiple countries or continents, affecting a large number of people.

In disaster prevention and mitigation, nurses must be able to conduct public health surveillance through using data to monitor health problems to facilitate their prevention or control (US CDC, 2012).

Deepening Your Understanding

City Disease Surveillance for COVID-19

To learn more how public health nurses contribute to disease surveillance, watch this video of Nurse Jealyza, who provided a weekly briefing on COVID-19 for Taguig City LGU:

- I Love Taguig TV (2022, March 20). CEDSU Disease Surveillance Nurse Jealyza Nadine Sadural shares COVID-19 areas of special concern.
<https://youtu.be/hqfbQ0GkUY8?t=20>

DISASTER PREPAREDNESS

The Philippine DRRM Law (RA No. 10121) defines **disaster preparedness** as the **knowledge and capacities** developed by **governments, professional response and recovery organizations, communities and individuals** to **effectively anticipate, respond to, and recover from the impacts** of likely, imminent or current hazard events or conditions.

In the context of health and nursing, preparedness generally focus on establishing and strengthening capacities of communities to anticipate, cope, and recover from the negative impacts of emergency occurrences and disasters (WHO & ICN, 2009).

Planning for disasters and emergencies is an ongoing and reiterative process. Below are the most important things to do in planning:

- **Needs Assessment**
- **Background work (situational analysis) on:**
 - Policies and plans
 - Environment and epidemiology/population
- **Stakeholder Involvement**
- **Prioritization and Goal Setting**
- **Identification of Strategies and Activities**
- **Identification of Appropriate Indicators**
- **Review of the Plan**
- **Implementation of the Plan**
- **Evaluation of the Results/Impact**

Note that **the steps involved in disaster preparedness planning are similar regardless of the nurse's practice setting** - whether in the hospital, community, workplace, etc. Therefore, it is **very important** that nurses are familiar with the process so they can lead or contribute in the development of the plan.

Disaster Risk Reduction and Management in Health (DRRM-H) Planning

The government, as the primary duty bearer, is responsible for ensuring the safety and welfare of its citizens. In the context of disasters and emergencies, **the national and local governments are responsible for preparing and implementing plans to ensure resilient health systems at the national, regional, provincial, city, municipal, and barangay levels as well as hospitals** (DOH, 2020).

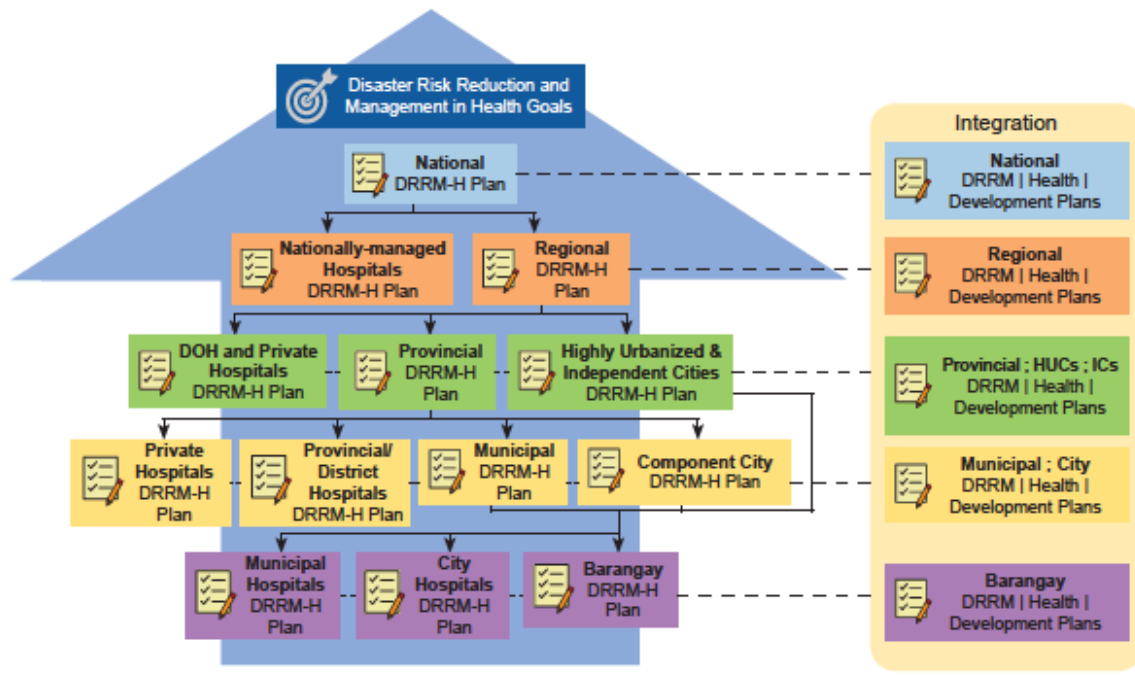


Figure 8. Structure of DRRM-H Planning Management in the Philippines (DOH, 2020)

In DRRM-H, the Department of Health through the Health Emergency Management Bureau (HEMB) leads and ensures that the national and local governments as well as hospitals (public and private) develop a DRRM-H Plan (Figure 8). This is similar to the previous Health Emergency Preparedness, Response and Recovery Plan (HEPRRP) (ibid). However, in the DRRM-H Plan, there is now equal emphasis on prevention and mitigation, as well as recovery and rehabilitation.

The DRRM-H plans are integrated and aligned into the larger, more comprehensive DRRM, health and development plans to contribute to the achievement of national goals as well as to ensure sustainability of the plan by allowing the different activities to be budgeted and implemented annually (ibid).

Through the DRRM-H planning process, opportunities for disaster prevention and mitigation can be optimized, adaptive capacities can be developed, response systems can be activated in a timely and efficient manner, and the build back better principle can be applied (DOH, 2020). In addition, DRRM-H planning guides resource acquisition/mobilization and allocation in the health system for emergency and disaster management, as well as enhance networking and coordination with other health agencies, government institutions and non-government organizations or civil society (ibid).

Figures 9-10 show the process of DRRM-H planning in LGUs and hospitals. Note that the **conduct of participatory hazard, risk, vulnerability, and capacity assessment is crucial to the development of plans in disaster management. Data and information obtained from assessment are needed to analyze and plan for interventions and activities on prevention and mitigation, preparedness, response, recovery and rehabilitation.**

For N110, we will focus more on disaster preparedness planning.

Local Government Unit DRRM-H Planning

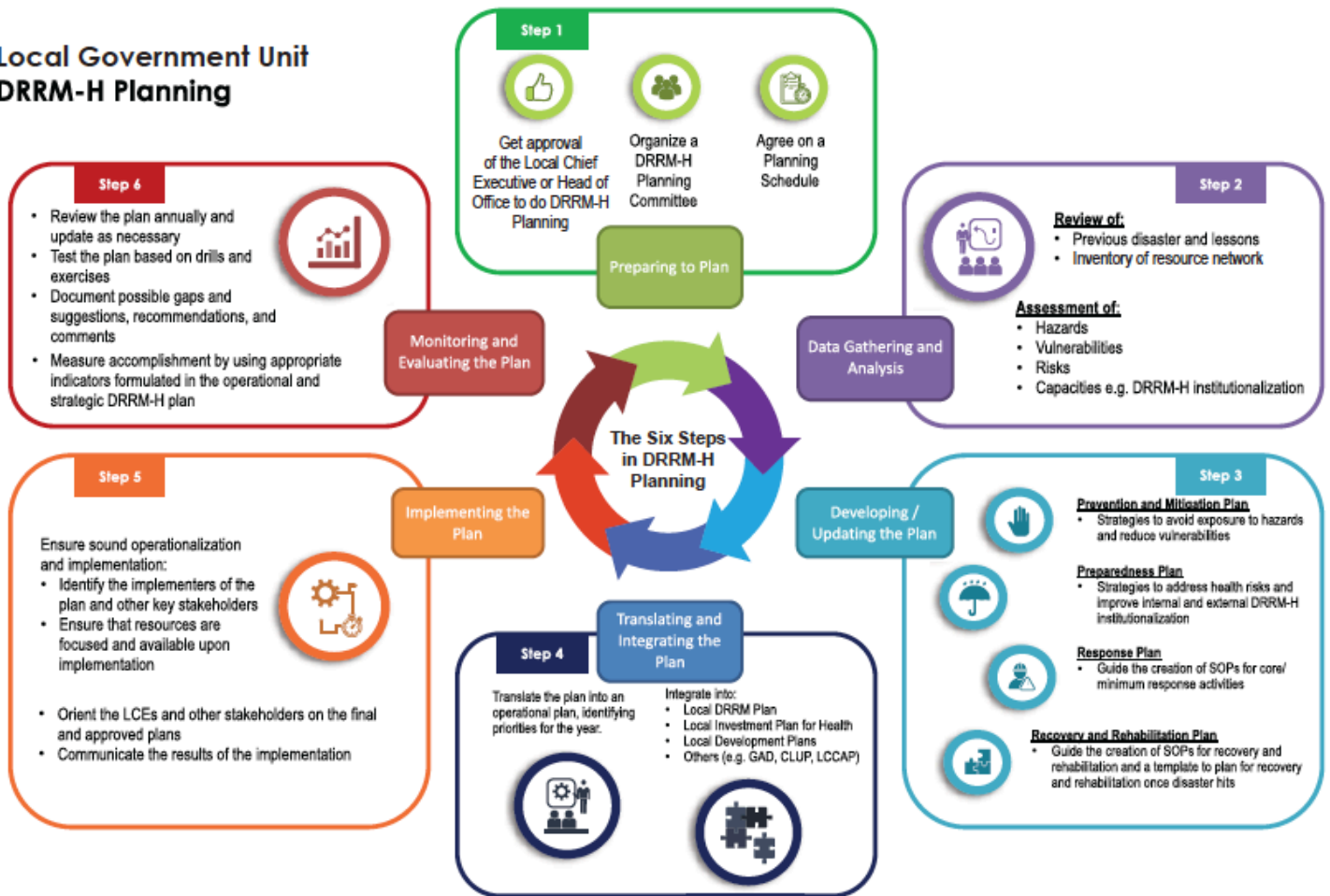


Figure 9. Process of DRRM-H Planning in LGUs (DOH, 2020)

Hospital DRRM-H Planning

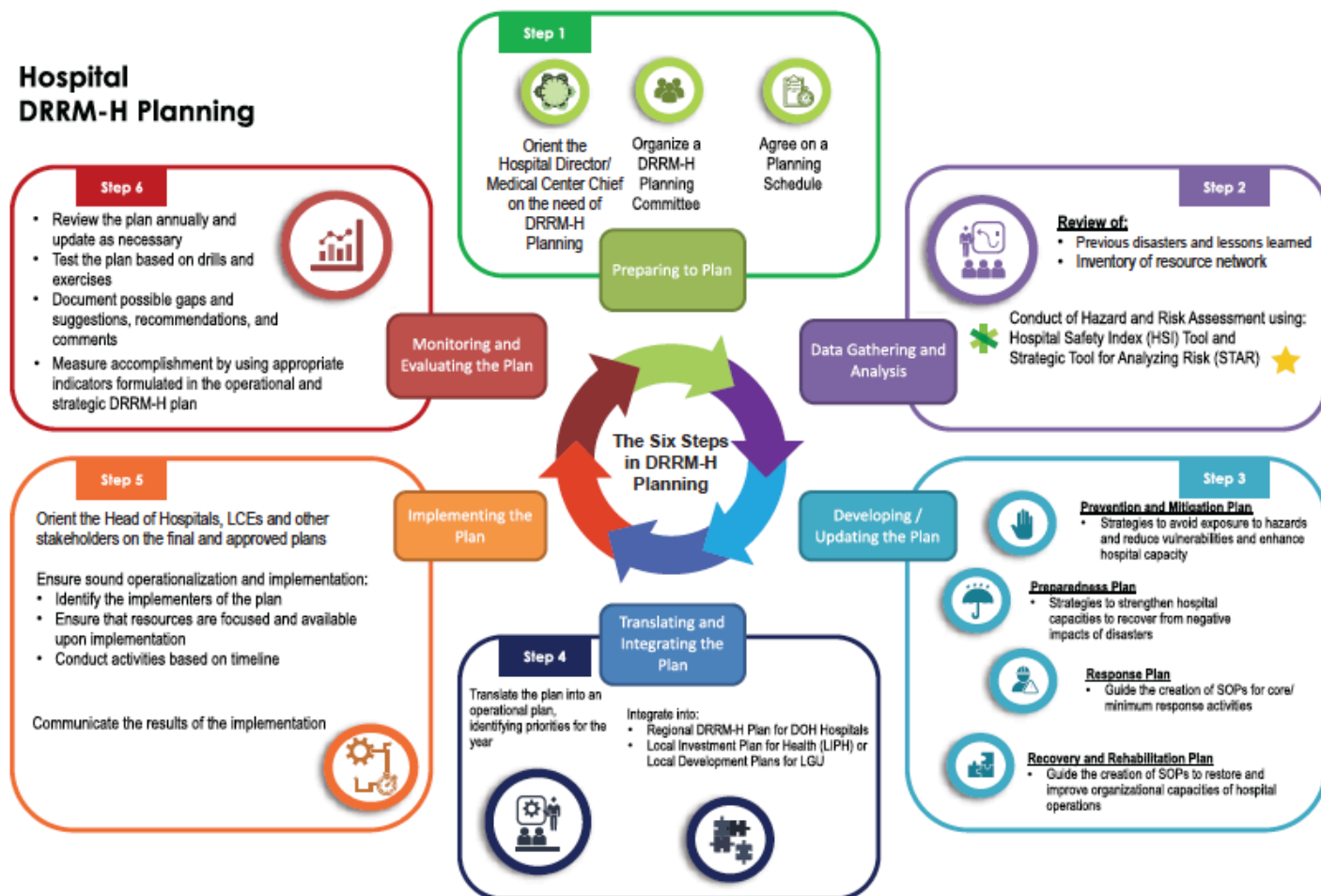


Figure 10. Process of DRRM-H in Hospitals (DOH, 2020)

Disaster Preparedness Planning

Disaster preparedness usually entails a number of plans. Among the **most essential at the local level** are the (1) main **local DRRM plan** (where the local DRRM-H plan should be integrated), (2) **contingency plan** (one for each local hazard), (3) **public service continuity plan**, and (4) **evacuation plan**.

Other disaster preparedness plans nurses must be familiar with are: (1) **surge capacity plan**, (2) **mass casualty management plan**, as well as (3) **safety and security plan**.

Contingency Plan

A **contingency plan** includes analysis of specific potential events or emerging situations that might threaten the health of the population already affected or potentially affected (DOH, 2020). This involves advance arrangements to enable timely, effective and appropriate responses to such potential events and situations, resulting to a scenario-based plan (ibid).

Contingency plans define the roles and responsibilities of involved institutions and stakeholders (who does what and how), coordination mechanisms and other operational arrangements across sectors that are set off before, during and after emergencies (CCS, MaCEC & SAC Northern Quezon, 2011). These are **developed for different worst case scenarios per hazard**, and **practiced through regular drills**

and simulations to build awareness, identify flaws and gaps in the plan, and revise the plan to ensure the safety of the population (ibid). Contingency planning is critical to ensuring the overall preparedness of communities to disasters (ibid).

Deepening Your Understanding

Contingency Planning

To learn more about how assessment data and information is used for contingency planning, read the resource below which describes the experience of Barangay Caracaran, Municipality of Rapu-Rapu, Province of Albay (**page 30-31**):

- Coastal CORE Sorsogon, Marinduque Council for Environmental Concerns & Social Action Center Northern Quezon (2011). *Voyage to disaster resilience in small islands. A guide for local leaders*. https://dilg.gov.ph/PDF_File/reports_resources/DILG-Resources-2012112-2a91abbcac.pdf

To see how a contingency plans in a barangay and school looks like, check the following links:

- Barangay San Jose, Guagua, Pampanga (2019). *Contingency plan and protocols*. https://drive.google.com/file/d/17W9ZY9eFGxIA5FeFMi74U9Was6kBOUz_/view?usp=sharing
- Paratong Elementary School (2020). *Contingency plan for COVID-19*. <https://drive.google.com/file/d/1nRKcFSjKlg96H3puZnFEa87TMFQeA38f/view?usp=sharing>

To know more about the details of contingency planning, you may access the following materials:

- ACCORD, Care Nederland & CNDR (2012). *Training on disaster preparedness and contingency planning: Contingency and risk reduction planning*. <http://test.accord.org.ph/wp-content/uploads/2017/09/ACCORD-manual-vol-3-Contingency-and-Risk-Reduction-Planning.pdf>
- Office of Civil Defense National Disaster Risk Reduction and Management Council (2020). *Contingency planning guidebook*. <https://drive.google.com/file/d/1vxXDte3BFjrjzY6D2zRdwalZfwDCHXAe/view>

For a quick guide to contingency planning in pandemics and sudden onset disasters (typhoon), you may look at this resource:

- ACCORD/CARE (2020). *Contingency planning checklist*. Quezon City, Philippines: Resilience and Innovation Learning Hub (RILHUB). <https://rilhub.org/wp-content/uploads/2020/10/PHL-RILHub-Contingency-Planning-Checklist-C19-NatDisasters-201020.pdf>

Public Service Continuity Plan

A **public service continuity plan** (also known as business continuity plan in the private sector) recognizes threats and risks facing an institution, including protection and functionality of personnel and assets in the event of a disaster (DOH, 2020).

It includes defining potential risks, determining how those risks will affect operations, implementing safeguards and procedures designed to mitigate those risks, testing those procedures to ensure that they work, and periodically reviewing the process to make sure that it is up to date (ibid).

Deepening Your Understanding

Public Service Continuity Plan

To learn more how government agencies and organizations develop public service continuity plans, you may access this resource:

- Philippine Disaster Resilience Foundation, OCD & NDRRMC (2020). *Public service continuity planning guidebook*. <https://iadapt.pdrf.org/PSCP-Guidebook-First-Edition-Sept2020-8.pdf>

To see how an actual public service continuity plan looks like, you may check out the Department of Energy's (DOE) public service continuity plan for the COVID-19 pandemic. DOE's continuity plan is comprehensive in content and national in scope, as it also includes its 17 field regional offices in the implementation of the plan.

- Department of Energy (2020). *Public service continuity plan*. Manila, Philippines: Task Force on Energy Resiliency. <https://www.doe.gov.ph/sites/default/files/pdf/issuances/do2020-06-0010-pscp.PDF>

Evacuation Plan

Evacuations are timely and rapid movement of people exposed to imminent or actual danger to safer locations and places of shelter (Global CCCM, 2014). In case of hazard events such as typhoons, floods, earthquakes, and tsunamis, hundreds to millions of people are needed to be moved within a very short period of time. In these situations, **evacuation planning** is crucial to effectively mobilize and coordinate capacity and resources, manage the safe and timely evacuation of all persons at risk, meet emergency needs and assistance, and ensure evacuees and other affected people are able to recover from the disruption and risks created by their displacement as soon as possible (ibid).

Deepening Your Understanding

Community Evacuation Planning

To learn more about planning for mass evacuations, you may access this guide:

- ACCORD, Care Nederland & CNDR (2012). Session 4: Evacuation planning. In *Training on disaster preparedness and contingency planning: Disaster preparedness*. <http://test.accord.org.ph/wp-content/uploads/2017/09/ACCORD-manual-vol-2-Disaster-Preparedness.pdf>
- Global Camp Coordination and Camp Management Cluster (2014). The MEND guide: Comprehensive guide for planning mass evacuations in natural disasters (pilot document). <https://environmentalmigration.iom.int/mend-guide-comprehensive-guide-planning-mass-evacuations-natural-disasters-pilot-document>

Community Evacuation Center Management

Evacuation center management is the major responsibility of the BDRRMC evacuation committee. Managing the evacuation center also includes overseeing medical or health concerns (done by the medical/health committee). To learn more about evacuation center management, read this resource:

- ACCORD, Care Nederland & CNDR (2012). Session 5: Evacuation center management. In *Training on disaster preparedness and contingency planning: Disaster preparedness*. <http://test.accord.org.ph/wp-content/uploads/2017/09/ACCORD-manual-vol-2-Disaster-Preparedness.pdf>

Community Participation in Evacuation Planning

To appreciate the importance of community engagement in disaster preparedness activities particularly evacuation planning, you may read this case study situated in the Navotas, Pateros and Quezon City:

- Global Protection Cluster (2020). Philippines: Community participation in evacuation planning in metropolitan Manila. https://www.globalprotectioncluster.org/wp-content/uploads/philippines_CP.pdf

Conducting Community Drills

Community drills are organized by a core group and implemented by the BDRRMC and the whole community. Drills may be conducted yearly to regularly train residents in preparing for hazards such as typhoon, flood, earthquake, fire, tsunami, etc. Conducting community drills also help improve the contingency plans. If community members perform their functions well during disasters and emergencies, and the contingency plans prove to be effective, more lives will be saved and more livelihoods will be protected. To learn more how to conduct community drills, you may check these resources:

- ACCORD (2015, October 7). Guide to conducting a community drill. <https://youtu.be/3OJfGvnfqk8>
- ACCORD, Care Nederland & CNDR (2012). Training on disaster preparedness and contingency planning: Guide to conducting a community drill. <http://test.accord.org.ph/wp-content/uploads/2017/09/ACCORD-manual-vol-4-Guide-to-Community-Drill.pdf>

Surge Capacity Plan

Surge capacity is the increased capacity to meet increased demand for health services beyond normal working or operational capacity (DOH, 2020). There are three (3) essential components of surge capacity: (1) staff, (2) stuff (i.e. equipment, medicines, and supplies, and (3) structure (i.e. physical and organizational such as Incident Command System or Incident Management System) (Kaji, Koenig & Bey, 2006).

In medical and public health events where patient care needs exceed existing resources, patient care capacity should be increased (ibid). This is done by increasing the three components of surge capacity.

Deepening Your Understanding

To learn more about surge capacity in the health system, you may read this resource:

- Kaji, A., Koenig, K.L. & Bey, T. (2006). Surge capacity for healthcare systems: A conceptual framework. *Society for Academic Medicine*, 13(11):1157-1159. <https://onlinelibrary.wiley.com/doi/epdf/10.1197/j.aem.2006.06.032>

Surge Capacity Plan for COVID-19 Pandemic

With the rapid rise of COVID-19 cases in highly urbanized areas such as NCR, all health facilities must have the surge capacity to address the sudden increase in number and prolonged demand of patients coming in for management and treatment. To learn more about how health facilities in the Philippines should prepare and improve their surge capacity for COVID-19, you may check this:

- Department of Health (2020). Interim guidelines on surge capacity management of all health facilities during the COVID-19 pandemic. Department Memorandum No. 2020-0171. <https://doh.gov.ph/sites/default/files/health-update/dm2020-0171.pdf>

Surge Capacity: Experience of a Public Tertiary Hospital for the COVID-19 Pandemic

In 2020, the Philippine General Hospital (PGH), the country's national university hospital, was designated by the Department of Health as a COVID-19 referral center. To learn how PGH prepared and responded for the increasing number of COVID-19 patients, read the article below:

- Toral, J.B., Alba, M.V., Reyes, Z.R. & Molina, A.J.R. (2021). The development of Philippine General Hospital as a referral center in the COVID-19 pandemic: A qualitative study. *Acta Medica Philippina*, 55(2): 137-149.
<https://actamedicaphilippina.upm.edu.ph/index.php/acta/article/view/2851/2260>

Mass Casualty Management Plan

A mass casualty incident is an event that generates more patients at one time than locally available resources can manage using routine procedures, and requires exceptional emergency arrangements and additional or extraordinary assistance (WHO, 2007).

Effective management of mass casualties requires coordinated efforts across various sectors. The effects of mass casualty incidents are particularly experienced at the community level, and should be the focus of disaster preparedness efforts (ibid).

Deepening Your Understanding

Mass Casualty Management

To learn more about planning for mass casualty management, check these resources:

- Department of Health, Health Emergency Management Bureau (2015). *Chapter 3: Management of victims*. In *Manual of operations on health emergency and disaster response management*.
https://drive.google.com/file/d/1SDvhpMWsAbLX7pDnSg41NMKJgl79DL_H/view?usp=sharing
- World Health Organization (2007). *Mass casualty management systems: Strategies and guidelines for building health sector capacity*. Geneva, Switzerland: WHO.
https://www.who.int/hac/techguidance/tools/mcm_guidelines_en.pdf

Safety and Security Plan

Safety and security must be maintained particularly within and around evacuation centers, where displaced persons with varying ages, gender, and socioeconomic status stay temporarily. Typical protection risks that may arise in evacuation centers include the following (Global CCCM, 2014):

- Gender-based violence (GBV)
- Abuse, neglect and exploitation of children
- Obstacles in accessing personal documents including identification documents
- Common crime and/or inadequate law enforcement
- Limited access to livelihood activities
- Conflicts among people staying in the evacuation center and host communities
- Restrictions to freedom of movement and choice of residence for displaced persons
- Limited participation in the management of the evacuation center by certain groups
- Discriminatory access to basic provisions and services (e.g. water, food, shelter, health services) particularly for persons with specific needs
- Risk deriving from family separation, particularly for children, older persons, PWDs and other individuals who rely on family support for survival

To prevent risks and respond to incidents, safety and security responsibilities include (Global CCCM, 2014):

- Security assessments of evacuation and transportation sites
- Maintaining general site security at designated evacuation locations
- Screening evacuees for prohibited weapons
- Preventing and/or responding to common crime and/or inadequate law enforcement
- Preventing and/or responding to incidents of GBV
- Preventing and/or responding to abuse, neglect and exploitation of children
- Overcoming discriminatory access to basic provisions and services

Deepening Your Understanding

Safety and Security in Evacuation Centers

To learn more about planning for safety and security, and ensure protection of individuals, refer to page 93-96:

- Global Camp Coordination and Camp Management Cluster (2014). The MEND guide: Comprehensive guide for planning mass evacuations in natural disasters (pilot document). <https://environmentalmigration.iom.int/mend-guide-comprehensive-guide-planning-mass-evacuations-natural-disasters-pilot-document>

Other Aspects of Disaster Preparedness

Deepening Your Understanding

Preparing the Individual and Family for Emergencies and Disasters

The following resources provide an easy guide to help individuals and families prepare and plan for emergencies and disasters:

Basic Guide

- Prepare Manila (n.d.) Emergency preparedness for Metro Manila. <https://preparemanila.org>

Family Preparedness Plan

- Habitat for Humanity International (2021). Family preparedness plan: Habitat ready, disaster preparedness for homeowners. <https://www.habitat.org/our-work/disaster-response/disaster-preparedness-homeowners/family-preparedness-plan>

Family Evacuation Plan

- Habitat for Humanity International (2021). Family evacuation plan: Habitat ready, disaster preparedness for homeowners. <https://www.habitat.org/our-work/disaster-response/disaster-preparedness-homeowners/family-evacuation-plan>

Emergency Survival Kit (also see Figures 11-12)

- Office of Civil Defense National Disaster Risk Reduction and Management Council (2013). Project DINA: Emergency Survival Kit. *Rappler*. <https://www.youtube.com/watch?v=lkuWZyhSgdo>

Home-based Care for COVID-19 (also see Figures 13-14)

- CORE Group (2020). *Home-based care reference guide for COVID-19*. Washington, DC: CORE Group. <https://coregroup.org/home-based-care-reference-guide-for-covid-19/>

Deepening Your Understanding

Public Health Preparedness Amidst the COVID-19 Pandemic: Nursing Experience

In the Philippines, government health facilities are the main mechanisms for the implementation of health programs and delivery of health services. Public health nurses working in the local government units are in the forefront of health promotion, disease prevention, and provision of primary care services in their respective communities.

The COVID-19 pandemic which started in 2020 provided unprecedented challenges to PHNs all over the country as they continue to do regular health programs and adjust to the current situation to ensure people in communities continue to receive quality health care.

To learn more about our public health nurses' experience in various parts of the Philippines in preparing and responding to the COVID-19 pandemic, view the following:

- Ms. Nelia A. Rafael, RN (Manila Health Department)
<https://youtu.be/Nde8dz69kzs>
- Ms. Leizyl Marie P. Omena, RN (RHU San Enrique, Iloilo)
<https://youtu.be/hgVm63MtkfY>
- Ms. Meg Leslie Yu, RN (Cagayan de Oro City Health Office)
<https://youtu.be/eBkV-sAdix4>

Hospital Preparedness Amidst the COVID-19 Pandemic: Nursing Experience

Patients with severe and critical symptoms of COVID-19 are catered to and managed in the hospitals because of the availability of specialized equipment, treatment and care in these health facilities. Nurses based in the hospitals must also prepare to receive patients

To learn more about our hospital nurses' experience from the government and private sector in preparing and responding to the COVID-19 pandemic, view the following:

- Mr. Harby O. Abellanosa, MSN, RN, FPSQUA, FPCHA, CESE (Cebu South Medical Center, formerly Talisay District Hospital)
<https://youtu.be/gWti8KZpzRI>
- Ms. Maria Cecilia E. Punzalan, MA, RN (Philippine General Hospital)
<https://youtu.be/DzGNtqQC6ew>
- Mr. Rodolfo C. Borromeo, EdD, RN, FPCHA, FANSAP, MMHoA (Manila Doctors Hospital)
<https://youtu.be/tGnEIFWQPDc>



GO BAG

EMERGENCY PREPAREDNESS BAG



REMINDERS:

- 1 The GO BAG should be checked and replenished every 3 months.
- 2 The GO BAG should be stored properly where it can be easily accessed in case of an emergency.
- 3 Coordinate with leaders on community evacuation plan, Decide with the family where to meet in case there is a need to evacuate.



Source: OCD



SAFETY TIPS

Contents of a Go Bag

The contents of the Go bag are items needed by the family to survive



- 1 Important documents in water proof container
- 2 Radio with fresh and extra batteries
- 3 First aid kit remedies for fever, LBM, minor wounds and pain, and maintenance medications
- 4 Spare cash including coins
- 5 Items for special needs of young and older members of the family, including persons with disabilities
- 6 Easy to serve, ready to eat food enough for three days
- 7 Drinking water in sealed container good for three days
- 8 Mobile phones, power banks, chargers
- 9 Clothing, raincoat, boots and sanitary napkin
- 10 Sleeping bags or mats, and blankets
- 11 Ropes, old newspapers, and ecobags made of strong materials

Source: Office of Civil Defense

LAGING HANDA

@LagingHandaPHL - Crisis Prevention Center

Figure 11-12. Go Bag or Survival Kit (Disaster Information Philippines, 2020)

MGA PAGHAHANDA SAKALING MAY MAGKASAKIT SA BAHAY

Isanilin mula sa World Health Organization



Ilang mahalagang paalala para maging handa sakaling may magkasakit ng COVID-19:

GUMAWA NG LISTAHAN NG MGA NUMERONG TATAWAGAN

Gumawa ng listahan ng mga numerong tatawagan kung sakaling mayroong magka-sintomas ng COVID-19 sa bahay, tulad ng lagnat, ubo, masakit na lalamunan, o hirap na paghinga. Kasama dito ang numero ng lokal na BHERT, pinaka-malapit na ospital o clinic, at mga malalapit na kapamilya, kaibigan o kasama sa trabaho.



IHANDA ANG MGA SUMUSUNOD NA GAMIT

Gamot na pang-maintenance, mask, alcohol at iba pang gamit na panglinis.



KUNG WALANG MALUBHANG SINTOMAS, MAARING MAGPAGALING SA BAHAY

Magtalaga ng hiwalay na kwarto at palikuran para sa sinumang may sakit para hindi kumalat ang COVID-19. Kung walang sapat na lugar sa bahay, maaring makipag-ugnayan sa LIGTAS COVID isolation centers.



BUMUO NG SUPPORT SYSTEM

Bumuo ng support system na tutulong para sa pagkain, transportasyon, pag-alaga sa mga bata at matatanda, at iba pang mga gawain na maaring hindi magampanan habang may sakit.



Tandaan, mahalagang maging handa upang manatiling ligtas sa COVID-19.

TAKE SAFETY PRECAUTIONS



TANDAAN ANG APAT DAPAT

A - Air circulation and ventilation
P - Physical distancing one meter or more
A - Always use face mask and face shield
T - Time of interaction less than 30 minutes

MGA KAILANGAN GAWIN KUNG MAY MAGKASAKIT SA BAHAY

Isanilin mula sa World Health Organization



Ano ang kailangan gawin kung sakaling mayroong magka-COVID-19 sa bahay:

1 IBUKOD ANG MAY SAKIT

Maghanda ng sariling palikuran at hiwalay na kwarto na maganda ang daloy ng hangin. Kung walang sapat na lugar, dalhin ang may sakit sa pinaka malapit na LIGTAS COVID isolation center.



2 IWASAN ANG PAGKALAT NG VIRUS

Ihiwalay ang plato, kutsara't tinidor, baso at iba pang gamit na personal para sa may sakit. Magsuot ng mask sa loob ng bahay at magtalaga ng isang kasapi sa bahay na maghahatid ng pagkain at mag-aalaga sa may sakit. Madalasang maglinis, mag-disinfect at maghugas ng kamay.



3 ALAGAAN ANG MAY SAKIT

Magmasid kung sakaling magkaroon ng malubhang sintomas ang may sakit, tulad ng hirap sa paghinga, pagkalito, sakit sa dibdib, o pagkawala ng kakayahang magsalita o kumilos. Bigyan ng sapat na tubig at masustansiyang pagkain. Siguraduhing patuloy na naiinom ang mga gamot na pang araw-araw (maintenance).



Tumawag sa local na BHERT para makatanggap ng tulong at payo. Ipagbigay alam din sa lahat ng close contacts ng may sakit para makapaghandang din sila kung sakaling sila ay nahawa.

Tandaan, mahalagang maging handa upang manatiling ligtas sa COVID-19.

TAKE SAFETY PRECAUTIONS



TANDAAN ANG APAT DAPAT

A - Air circulation and ventilation
P - Physical distancing one meter or more
A - Always use face mask and face shield
T - Time of interaction less than 30 minutes

Source: <https://www.facebook.com/raymondjohnnaquit/posts/10208611436359084>

Translation: Dr. Ayz Ligot, Dr. Lizette Lopez

Figure 13-14. Household Preparedness for COVID-19 and General Home Care for Patients with COVID-19

References

- Coastal CORE Sorsogon, Marinduque Council for Environmental Concerns & Social Action Center Northern Quezon (2011). Voyage to disaster resilience in small islands. A guide for local leaders. https://dilg.gov.ph/PDF_File/reports_resources/DILG-Resources-2012112-2a91abbcac.pdf
- Department of Health (2020). *Disaster risk reduction and management in health planning guide*. Manila, Philippines: DOH Health Emergency Management Bureau.
- Global Camp Coordination and Camp Management Cluster (2014). The MEND guide: Comprehensive guide for planning mass evacuations in natural disasters (pilot document). <https://environmentalmigration.iom.int/mend-guide-comprehensive-guide-planning-mass-evacuations-natural-disasters-pilot-document>
- Kaji, A., Koenig, K.L. & Bey, T. (2006). Surge capacity for healthcare systems: A conceptual framework. *Society for Academic Medicine*, 13(11):1157-1159. <https://onlinelibrary.wiley.com/doi/epdf/10.1197/j.aem.2006.06.032>
- World Health Organization (2007). Mass casualty management systems: Strategies and guidelines for building health sector capacity. Geneva, Switzerland: WHO. https://www.who.int/hac/techguidance/tools/mcm_guidelines_en.pdf

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