



Manual of Procedures



**Food and Water-borne
Diseases Prevention and
Control Program**

DEPARTMENT OF HEALTH

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Foreword

Food and water-borne diseases (FWBD) are conditions caused by intake of contaminated food and water. Globally, people are at risk of developing a food and water-borne disease daily because food and water can be contaminated at any point of its production. Diarrhea is the most common manifestation of food and water-borne diseases. In the Philippines, a total of 41,220 cases and 91 deaths due to diarrhea (caused by infectious organisms) were reported in 2017.

The Department of Health recognizes the magnitude of the problem caused by food and water-borne diseases. It also acknowledges that a successful prevention and control program involves the coordination and collaboration with other DOH and non-DOH agencies. Thus in 1997 through the Administrative Order 29-A, the FWBD Prevention and Control Program was established.

After more than a decade, the program has achieved important milestones in its' implementation such as Clinical Practice Guidelines (CPG) for Management of Acute Diarrhea and a National Strategic Plan for FWBD-PCP 2019-2023. Thus, in support and to facilitate the operationalization of the National Strategic Plan, this Manual of Procedures was developed.

The manual provides the reader an account of the program's development and current implementation framework wherein the responsibility of the various agencies involved in the implementation of the program are clearly defined. The manual was developed with the health workers and supervisors as the main users. Thus, in certain sections, basic principles are included to provide further information or the rationale for certain processes. The manual was developed through concerted efforts of the various agencies involved in the effective implementation of the program.

I would like to enjoin our program managers and frontline health workers in health care facilities involved in preventing, detecting and managing cases at the local government units to partake in the achievement of the FWBD program's vision. It may not be easy, but with everyone doing its roles as stipulated in this MOP, I believe we can achieve.

Acronyms

AO	Administrative Order
BHS	Barangay Health Station
BHW	Barangay Health Worker
BQ	Bureau of Quarantine
CESU	City Epidemiology Surveillance Unit
CHDD	Children's Health Development Division
CHO	City Health Office
CPG	Clinical Practice Guidelines
DA	Department of Agriculture
DC	Department Circular
DENR	Department of Environment and Natural Resources
DILG	Department of Interior and Local Government
DPCB	Disease Prevention and Control Bureau
DPO	Department Personnel Order
DRU	Data Reporting Unit
DSWD	Department of Social Welfare and Development
EB	Epidemiology Bureau
ENCDD	Essential Non-Communicable Diseases Division
ERDD	Environmental Related Disease Division

FDA	Food and Drug Administration
FERG	Food-borne Disease Burden Epidemiology Reference Group
FHO	Family Health Office
FWBD	Food and water-borne disease
FWBD-PCP	Food and Water-borne Disease Prevention and Control Program
GHO	Global Health Observatory
HEMB	Health Emergency Management Bureau
HPCS	Health Promotion and Communication Services
IDED	Infectious Diseases for Elimination Division
IDO	Infectious Disease Office
IHR	International Health Regulation
LCE	Local Chief Executive
LGU	Local Government Unit
LRDD	Lifestyle-Related Diseases Division
MHO	Municipal Health Office
NRL	National Reference Laboratory
NSP	National Strategic Plan
PDOHO	Provincial DOH Office
PHSID	Public Health Surveillance and Informatics Division
PIDSR	Philippine Integrated Disease Surveillance and Response
RA	Republic Act

RDT	Rapid Diagnostic Test
RESU	Regional Epidemiology and Surveillance Unit
RHU	Rural Health Unit
RITM	Research Institute of Tropical Medicine
SEA	South East Asia
TWG	Technical Working Group
WMHDD	Women and Men's Health Development Division

Glossary

Acute Diarrhea	Is the passage of three or more loose stools from an immunocompetent person's normal baseline in a 24 hour period with a duration of less than 14 days. (CPG)
Acute Infectious Diarrhea	is suspected if a patient presents with passage of 3 or more loose, watery or bloody stools within 24 hours that may be accompanied by any of the following symptoms: nausea, vomiting, abdominal pain, and fever. (CPG)
Acute Bloody Diarrhea	Is a diarrheal disease with visible blood in the stool
Acute public health event	Any event that represents an immediate threat to human health and requires prompt action. It includes event that have not yet led to disease in humans but that have the potential to cause such disease through exposure to an infected or contaminated food, water, animals, manufactured products, or as a result of direct or indirect consequences of natural events, conflicts or other disruption of critical infrastructure (WHO 2014)
Agent	A biological or chemical substance that is present or excessively present in food or water that is essential for the occurrence of the disease
Alert Threshold	Refers to the level of occurrence of the disease that serves as an early warning for epidemic. An increase in the number of cases above the threshold level should trigger an investigation, check epidemic preparedness and implement appropriate prevention and control measures
Amoebiasis	An acute bloody diarrhea caused by a protozoan parasite (e.g. <i>Entamoeba histolytica</i>)
Annual Notification Rate	Total number of cases notified in a year per 100,000 population
Case	Any person who meets a case definition, either for surveillance purposes or during an outbreak investigation

Case, confirmed	Is a case verified by laboratory analysis
Case Definition	A set of criteria that must be fulfilled in order to identify a person as having a particular disease or condition
Case, probable	Is a case with clear clinical picture or linked epidemiologically with a confirmed case
Case, suspected	Is a case presenting indicative clinical picture without being confirmed or probable case
Case Fatality Ratio	The proportion of all cases that die because of the disease
Cholera	Acute watery diarrhea with or without vomiting and confirmed by the isolation of <i>Vibrio cholerae</i> in stool.
Cluster	Refers to the aggregation of relatively uncommon events or diseases in space and/or in time in magnitude that is believed to be greater than could be expected by chance
Contamination	Presence of infectious or non-infectious agent in an inanimate article or substance
Contamination in Food	The presence of a disease or microbial agent on or in food that may come into contact with the food
Disease	Refers to a specific illness or medical condition, irrespective of origin or source that directly presents or has the potential to present significant harm to
Drinking Water	Water intended for direct consumption or for use in food preparation and related processes

Epidemic	Refers to the occurrence in the community or region of cases of an illness, specific health related behavior or other health related events clearly in excess of normal expectancy. The number of cases indicating the presence of epidemic varies according to the agent, size and type of population exposed; previous experience or lack of exposure to the disease, and time and place of occurrence.
Epidemiology and Surveillance Unit	Refers to the unit established in the Centers for Health Development, Provincial Health Offices and Rural Health Units that provide services on public health surveillance and epidemiology
Evaluation	The periodic assessment of the relevance, effectiveness and impact of activities in relation to the objectives of the of the program or project
Food	Any substance whether processed, semi-processed or raw which is intended for human consumption
Food and water-borne disease	Any disease of an infectious or toxic nature caused by the consumption of contaminated food or water
Food-borne event	Any event related to the occurrence of disease in humans that is caused by contaminated food or that has a potential to expose humans to known or suspected hazards through food
Food-borne helminth	Refers to foodborne trematodes (<i>Paragonimus westermani</i> , Heterophyid flukes, <i>Fasciola</i> , <i>Echinostoma</i>) and other helminthes such as <i>Capillaria philippinensis</i> and <i>Taenia solium</i> and <i>T. saginata</i>
Food and water-borne diseases outbreak	The occurrence of two or more cases resulting from the ingestion of the same food or drink
Food Establishment	An establishment where food or drinks are manufactured, processed, stored, sold or served
Food Safety	refers to the assurance that food will not cause harm to the consumer when it is prepared or eaten according to its intended use. (RA 1061)

International Health Regulation	Refers to the international legal instrument that binds all WHO Member States to implement a set of international standards with the aim to prevent, protect against, control and provide public health response to the international spread of disease in ways that are commensurate with and restricted to public health risks, and which avoid unnecessary interference with international traffic and trade
Monitoring	The routine and continuous tracking of the implementation of the planned activities and of the overall performance
Multisectoral collaboration	Multiple sectors working together to achieve common objectives, goals and tasks with shared responsibility. For food and water-borne diseases, it involves staff from the public health surveillance and response sector, food safety sector, animal health sector, environmental health and other relevant sectors
Notifiable diseases	A disease of public health importance that must be reported to public health authority under legislation or decree, in the pertinent jurisdiction when a diagnosis is made (Porta 2014)
Outbreak	Synonymous with epidemic, when used in a sentence, refers to an epidemic limited to localized increase in the incidence of a disease e.g. in a village, town or closed institution (Adapted from LAST JM, ED. A Dictionary of Epidemiology, 1997)
Point of Entry	Refers to a passage for international entry or exit of travelers, baggage, cargo, containers, conveyances, goods and postal parcels as well as agencies and areas providing services to them on entry or exit

Public Health Surveillance	refers to the ongoing, systematic collection, analysis, interpretation and timely dissemination of health data for the planning, implementation and evaluation of public health program. The use of information based from these data to disease prevention and health promotion program completes the surveillance cycle in public health.
Quarantine	Refers to the restriction of activities and/or separation from others of suspect persons who are not ill or of suspected baggage, containers, conveyances, or goods in such a manner as to prevent the possible spread of infection or contamination
Response	Any public health action (such as event monitoring, providing information to the public, field investigations and control or mitigation measures) triggered by the detection of a public health risk (WHO 2014)
Surveillance and Response for food and water borne diseases	Use of existing surveillance and response system for food and water-borne diseases
Surveillance and response system	The existing infrastructure, staff and processes used for surveillance of and response to communicable diseases
Syndromes	refers to a symptom complex in which the symptoms and/or signs coexist more frequently than would be expected by chance on the assumption of independence.



Section I: Introduction

This section discusses the:

- Purpose and Scope of the Manual
- Epidemiology of Food and Water-borne Diseases
- Food and Water-borne Diseases – Prevention and Control Program
 - Policy Background
 - Structure
 - Program Milestones
 - Overview of the National Strategic Plan 2019-2022

1.0 Introduction

1.1 Purpose and Scope of the Manual

The manual was developed to:




1. Understand the rationale of the Food and Water-borne Diseases – Prevention and Control Program (FWBD-PCP) and the current road map of the program in achieving its program goal and objectives;
2. Define the role of each agencies within DOH and other government agencies in the implementation of the different program components at various level of the government structure;
3. Serve as a guide for health workers and program supervisors involve in implementing the program strategies and activities

This manual covers the present scope of the program; which focuses on food or water-borne diseases caused by bacteria, viruses and foodborne helminths. **Toxins and biochemicals** are not included even if they cause a food or water-borne event or disease. Discussion on specific FWBD is limited to the syndromic manifestations (bloody and watery diarrhea). However, some infectious FWBD such as Cholera, Hepatitis A, Typhoid Fever and Rotavirus are also discussed because of their public health importance that such diseases are included in the national disease surveillance system as mandated by the law.

1.2 Users of the Manual

The manual is intended for use primarily by the health workers (doctors, nurses, midwives, sanitary inspectors and barangay health workers) in health care facilities involved in detecting, managing cases and implementing preventive measures at the local government units. Thus, the manual contains principles and processes. It also has boxes and annexes that provide additional information or illustrations.

Other users of the manual may include but not be limited to:

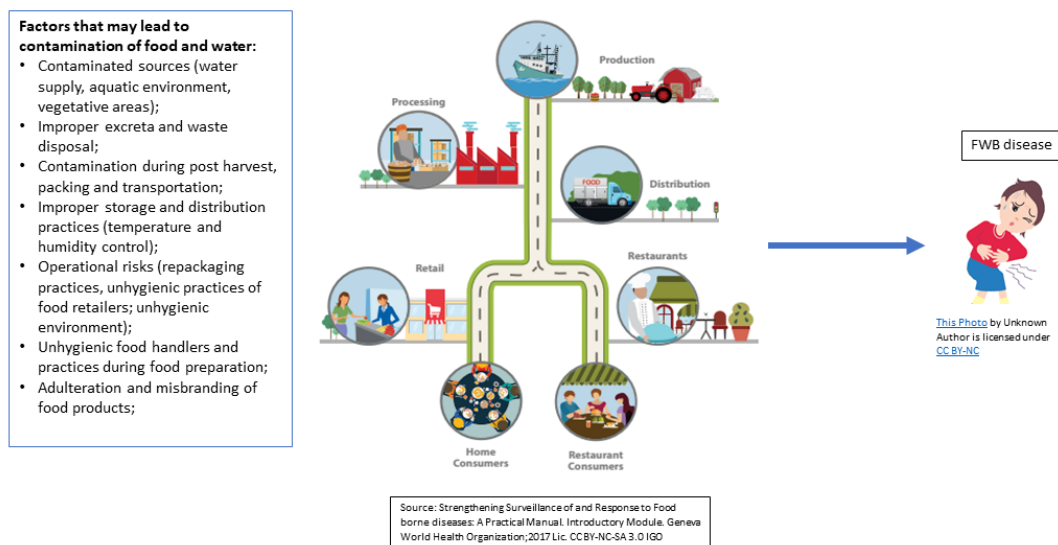
-  Program supervisors at the regional health and provincial health offices who are involved in addressing food and water-borne diseases including health emergencies situations;
-  Members of the epidemic investigation and control team;
-  Program managers of other government agencies at the provincial, regional and national level

1.3 Food and Water-borne Diseases

1.3.1. What is food and water-borne disease?

Food and water-borne diseases are conditions caused by intake of contaminated food and water. Across the different stages of food production pathway, conditions or factors may be present. These conditions posed a risk for the growth of bacteria/viruses or introduction of food-borne helminths in food/water causing a disease in humans (Figure 1)

Fig. 1 Food Production Pathway in the Development of Food and Water-borne Diseases



1.3.2. Why food and water-borne diseases are of global concern

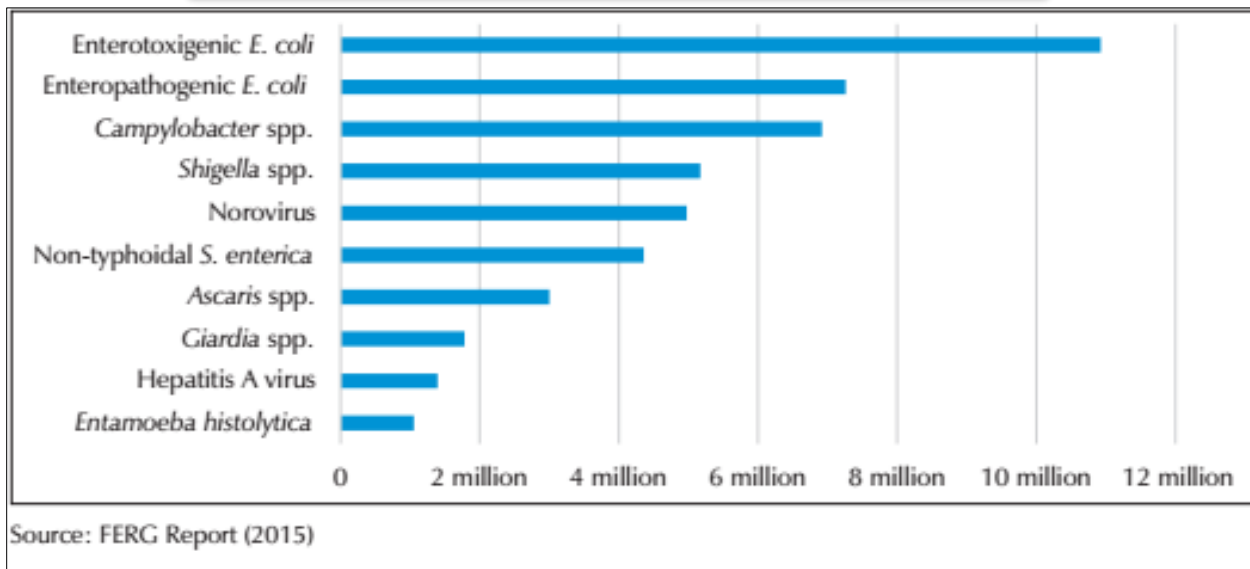
FWBD are a major concern globally because of various reasons: 1) The contaminants are varied (bacteria, viruses, parasitic agents, and toxins); 2) The vehicle (medium) of the agent are the basic needs of humans (water and food); 3) Their outcome may be explosive causing sickness and death to many people; 4) It is difficult to measure the magnitude of the burden as majority of the cases may manifest minor symptoms or self-limiting and are not being reported; and 4) They may have consequence on the economic development of a country (tourism, food export industries, agriculture, marine products).

1.3.3. Epidemiology of food and water-borne diseases

Yearly, billions of people are at risk of developing food and water-borne diseases (FWBDs) and millions will have the disease. Diarrhea is the most common manifestation of food and water-borne diseases. Globally, infectious agents that caused diarrheal diseases accounted for the majority of the 600M cases of illness caused by food-borne hazards (WHO, 2015). According to the Global Health Observatory (GHO) data, diarrhea accounts for 9% (525, 000 each year) of the total deaths among children below 5 years old.

The South-East Asian Region has the second highest burden of FWBDs after the African Region, with more than 150 million cases and 175 000 deaths annually (WHO, 2016). In South East Asia three out of 10 under-five children suffer from diarrhea and the region contributes one third of the global deaths due to diarrhea in the under-five children (WHO, 2016). Figure 2 shows the common pathogens that caused food-borne diseases in children under-five years of age in the Southeast Asian Region.

Fig. 2 Top Ten Causes of Food-borne Illnesses In Under-Five Children in South East Asian Region



In the Philippines, a total of 143 food and water-borne health events were verified by the Event-Based Surveillance (ESR) from 2012-2016; with 17, 246 cases and 115 deaths.

There are five (5) infectious FWBDs that are under surveillance in the Philippines. These are acute bloody diarrhea, cholera, rotavirus, hepatitis A and typhoid. As compared to 2016, there is an increase in the number of cases of acute bloody diarrhea and cholera in 2017 with 30.45% and 9.24%, respectively (Table 1). Cholera has the highest case fatality rate at 0.77%.

Table. 1 Food and Water-borne Diseases, Philippines 2017 vs 2016

FOOD/WATER-BORNE DISEASES	2017			2016	% Difference +2017 vs 2016
	Cases	Deaths	CFR (%)	Cases	
Acute Bloody Diarrhea	17,768	48	0.27	13,621	↑ 30.45
Confirmed Cholera	130	1	0.77	119	↑ 9.24
Confirmed Rotavirus	1,247	1	0.08	1,413	↓ -11.75
Hepatitis A	422	1	0.24	646	↓ -34.67
Typhoid	21,653	40	0.18	29,984	↓ -27.78

Source: 2017 Food and Water-borne Diseases Morbidity Week (MW1-MW48), PIDS

1.4 Food and Water-borne Diseases Prevention and Control Program

1.4.1. Policy Background:

Although the program was established in 1997, the **Presidential Decree 856**, also known as, **Sanitation Code of the Philippines** was signed in 1975 by the incumbent President and was given the force of law. The ultimate objective of the Sanitation Code is directing public health services towards the protection and promotion of health of the people (PD 856). The Code covers the general sanitation policies on water supply; food establishments; markets and abattoirs; school sanitation and health services; port, airports, vessel and aircraft sanitation; vermin control; sewage collection and disposal and excreta disposal and drainage; refuse disposal etc. All the provisions of the Code when strictly implemented will prevent/reduce the food and water-borne diseases.

In November 1993, the Department Circular No. 179 was signed and approved by DOH Undersecretary Galvez Tan. The **DC 179** refers to the **Policies and Guidelines for the National Control of Diarrheal Diseases** (Annex A). CDD program was focused on management, treatment and prevention of diarrhea among under-five children and was later on integrated in the Integrated Management of Childhood Illnesses (IMCI). DC 179 was followed by **DC 110: Intensifying the Program on Food Handlers and Water Quality Surveillance** to curb outbreaks from water and sanitation related diseases.

Finally, **Administrative Order 29-A** established the food and water-borne diseases prevention and control program in 1997 under the Communicable Disease Control Service. The AO 29-A stated the five program objectives and defines the six program components. After the creation of the FWBD-PCP, more policies were passed to support the implementation of the program (Box 1).

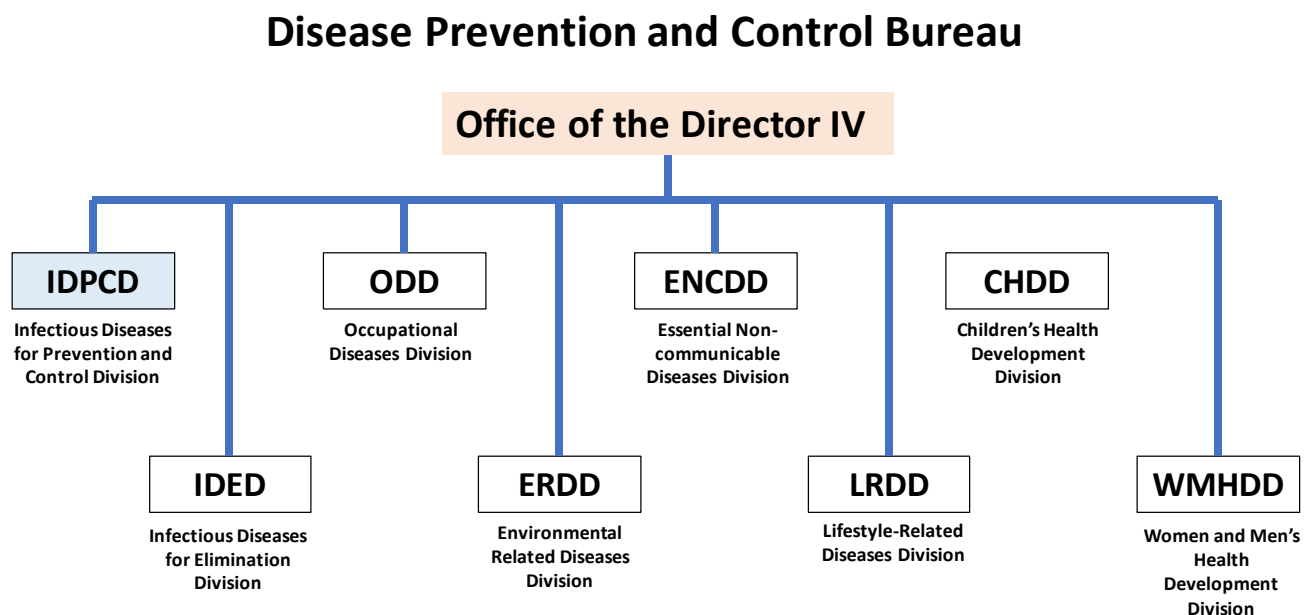
Box 1: Other policies supporting the FWBD PCP

1929 RA 3573	Law on Reporting of Communicable Diseases
1997. DOH DO No. 99-H	Designation of Ad Hoc Committee for the formulation of plans, policies and standards for the FWBD-PCP
PhilHealth Circular No. 030s-2000	Strict Compliance to Republic Act – the Law on Reporting Communicable Diseases
2001. DOH DC No. 176	Revised of List of Notifiable or Reportable Diseases
2005. AO No. 0012	Development of Guidelines for FWBD Surveillance
2007 AO No. 0012	Issuance of the Philippine National Standards for Drinking Water
2010 AO No 2010-0037	Issuance of Diagnosis and Treatment Guidelines for Paragonimiasis
2012. RA 10611	Food Safety Act
2014	Manual of Procedures for the Surveillance, Outbreak Investigation and Response to Microbial Agents of Food and Water-borne Diseases supported by WHO and Research Institute for Tropical Medicine (RITM)
AO No. 2015- 0050	Designation of the Research Institute for Tropical Medicine as the National Reference Laboratory for Rotaviruses and Other Enteric Viruses
DPO No. 2017-3642	Creation of the Technical Task Force, Expert Panel and Steering Committee for the Development of Clinical Practice Guidelines on Selected Food and Water-borne Diseases
DPO No. 2017-5438	Creation of the TWG, Expert Panel and Steering Committee for the Food and Waterborne Disease Prevention and Control Program

1.4.2. Structure:

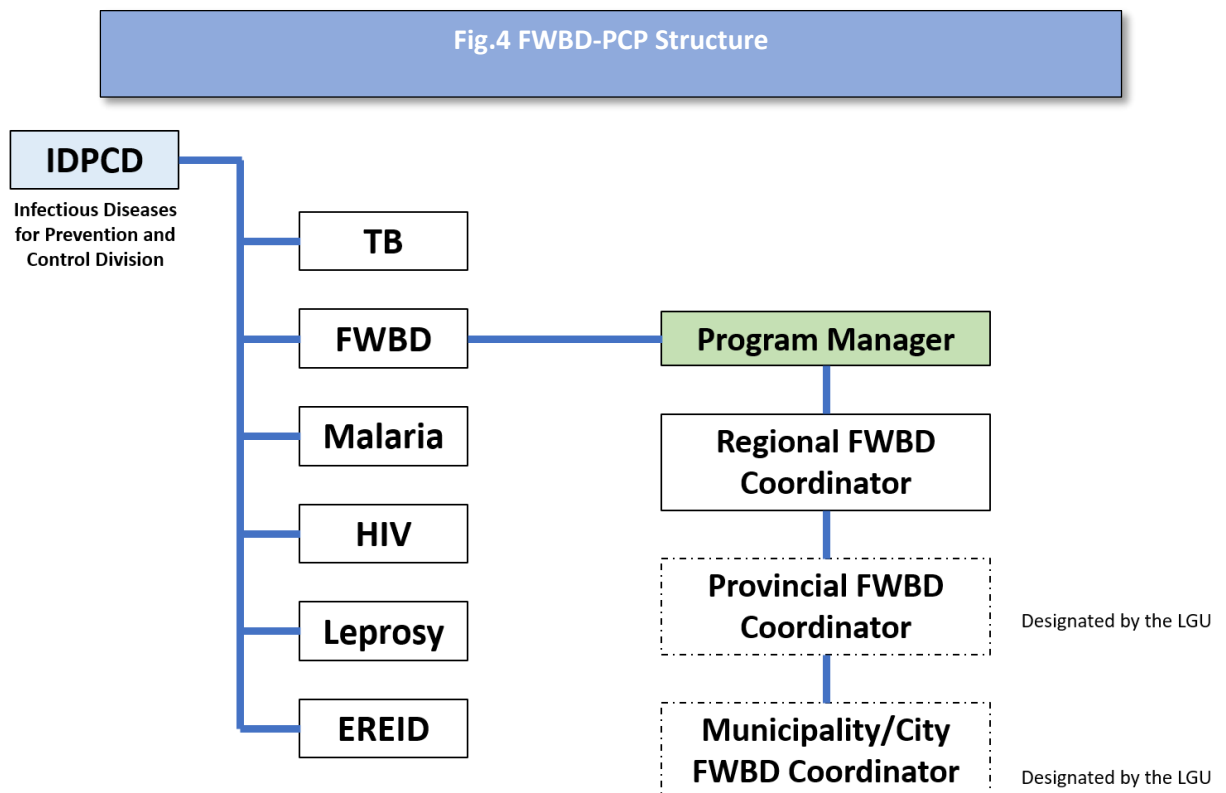
Executive Order No. 366 lists the different health divisions under the Disease Prevention and Control Bureau (DPCB) wherein the Infectious Diseases for Prevention and Control Division (IDPCD) is included (Fig. 3). The FWBD-PCP is one of the programs under the said Division. To achieve its goal of reducing morbidity and mortality of food and water-borne diseases, the program will be working with the Environmental Related Diseases Division which is under the same Bureau.

Fig.3 Organizational Structure of Disease Prevention and Control Bureau



The program is also working with the other Bureaus and Services within the Department of Health such as the Epidemiology Bureau, Health Emergency and Management Bureau, Health Promotion and Communication Services, Procurement Services, Food and Drug Administration, Bureau of Quarantine, and Research Institute for Tropical Medicine (Annex B) and San Lázaro Hospital. The program is also working with the Academe (UP), other multi-specialty societies, WHO and other development partners and other agencies working on food and safety (DA/FDA/NMIS/BAI).

The FWBD-PC Program is managed by a Program Manager at the Central DOH. Its mandates and activities are implemented and supervised by the Program and the Regional FWBD Coordinators (Fig. 4). The Regional FWBD coordinator will work with the Regional Surveillance Unit, Family Health Cluster, Environmental and Occupational Health Unit, Health Education and Promotion Unit, Provincial DOH Office, and supervise the implementation of the program at the Local Government Units. At the LGU level, there are designated FWBD coordinator.



1.4.3. Milestones

Some of the past achievements of the program are the following:

- ✚ Institutionalization of Oral Rehydration Therapy (ORT) corners (CDD program) in both the hospitals and outpatient public health facilities for the immediate management and treatment of diarrhea cases,
- ✚ Integration of the identification and management of diarrhea among the children in the Integrated Management of Childhood Illnesses (IMCI) protocol,
- ✚ Design, installation and operationalization of a FWBD surveillance and response system to detect impending outbreaks and provide immediate investigation and response to these cases,
- ✚ Provision of drugs/medicines and supplies augmentation to identified local government units (LGUs) with high incidence of FWBDs,
- ✚ Development of the Strategic Plan for 2019-2023;
- ✚ Development of the Clinical Practice Guidelines for the Management of Acute Diarrhea;
- ✚ Development of Health Advisories and IEC materials such as posters and flip charts;
- ✚ Development of Communication Plan;
- ✚ Development of Monitoring and Evaluation Plan
- ✚ Development of Guidelines on the Revision of the AO 1997 29-A on the Creation of the Food and Water-borne Disease Prevention and Control Program;
- ✚ Development of Guidelines for the Advance Implementation of Cholera Management as Public Health concern;
- ✚ Development of Guidelines for the Implementation of the FWBD Program Oral Rehydration Therapy Corner Utilizing the Clinical Practice Guidelines on Acute Infectious Diarrhea;
- ✚ DM 2018-0065 Approved Guidelines on Integrated Paragonimiasis in the National Tuberculosis Program Microscopy Services;
- ✚ DM 2017-0486 Approved Interim Guideline on the use of Rapid Diagnostic Test for cholera cases among Internally Displaced Population (IDP) during Humanitarian Crisis;
- ✚ DC 2018-0249 DC FWBD Advisory Alert During Rainy Season;
- ✚ Inter-agency meeting with DA and other partners;
- ✚ Food-borne Trematode Research
- ✚

1.4.4. National Strategic Plan 2019-2023

1.2.4.1 Assessment of 2011-2016 Strategies

In 2016, an assessment of the program was conducted. A Technical Working Group (TWG) was created to provide overall technical guidance during the assessment. The TWG is chaired by the Division, Chief of the DOH-IDO with members coming from other DOH central office officials and technical staff and regional offices, partners from the academe and WHO. The objectives of the assessment were the following:

- 1) establish FWBD-PCP performance level against the goals and targets set in the 2011-2016 DOH-National Objectives for Health (NOH);
- 2) determine the extent by which the FWBD's key strategies were operationalized and implemented;
- 3) identify the factors that influenced the performance levels and implementation status of the FWBD-PCP components;
- 4) summarize the gaps and challenges and come up with recommendations to address them.

The evaluation was conducted using various methodologies such as consultative meeting with stakeholders; key informant interview with DOH officials, regional coordinators and partners; data collection and field validation visits.

Based on the review of records and key informant interview of various stakeholders, the program achieved significantly vis a vis the strategies set for 2011-2016 (Annex C). However, the assessment also identified some existing gaps and the challenges that the program needs to work on (Table 2)

**Table 2. Gaps and Challenges
Assessment of FWBD-PCP, 2016**

Reform Area	Gaps and Challenges
Service Delivery a. Supply	<ul style="list-style-type: none">• absence of CPGs on the diagnosis and management of FWBDs resulting to varying standards and protocols practiced by the different hospitals• ORT corners no longer found operational in health facilities• inadequate knowledge of service providers on diarrhea management• lack of trained staff on IMCI in the health facility• non-availability of vaccines for all cases of diarrhea• service delivery network for FWBDs unclear• negative attitude of health workers

Reform Area	Gaps and Challenges
b. Demand	<ul style="list-style-type: none"> • poor health seeking behaviors of patients due to varying reasons (e.g. cultural beliefs) • community not aware of disease consequences due to lack of IEC resulting from inappropriate messages and ineffective information dissemination • No KAP survey conducted • Lack of trust in government health facilities
Leadership	<ul style="list-style-type: none"> • low priority on FWBD program in some LGUs • lack of support from some LCEs • lack of ownership of the program • wrong perception of devolution particularly political will on health matters • political problems/intervention/ interest among departments • lack of good governance and ethical leadership
Organizational Support Structure	<ul style="list-style-type: none"> • management of FWBD-PCP has been transferred from one DOH unit to another (from IDO to EH and back to IDO); management within IDO also transferred from NTD cluster to the other IDO unit • National and Regional FWBD-PCP Coordinators only recently designated; all regional coordinators are handling other programs • overall management of FWBD-PCP remains unclear at the local level; no overall coordinator assigned; in some areas, the program is placed either under the Sanitation Unit or the municipal/city surveillance and epidemiology unit, but none has been designated to coordinate diagnosis, management and treatment including governance component • Regional and local FWBD-PCP Coordinators not trained • fast turn-over of coordinators • no clear-cut coordination among DOH offices involved in the program • scope and limitation of FWBD-PCP vis-à-vis other programs not clearly streamlined
Policies/ Guidelines and Plans	<ul style="list-style-type: none"> • FWBD-PCP lacks overall program framework; hence implementation of components remains fragmented • absence of strategic plan to guide implementation • no manual of operations to provide standards to be followed • compliance/adherence to national policies and laws not monitored • management of other FWBDs (e.g. Hepatitis A, amoebiasis dysentery, etc.) still without CPGs • program not cascaded and institutionalized at regional and local levels; unaware of policies including roles and functions • lack of orientation on FWBD-PCP; preventive vis-à-vis curative not clear to all stakeholders
Health Human Resource	<ul style="list-style-type: none"> • limited number of sanitary inspectors at the local level (e.g. Tanay, Rizal with > 100,000 population has only 1 SI) • some SIs are under contractual/job order employment; no plantilla position for SIs • most nurses and midwives lack training on IMCI while some are still not oriented on IYCF • no specific training on FWBD diagnosis, management, treatment

Reform Area	Gaps and Challenges
Monitoring and Evaluation	<ul style="list-style-type: none"> • absence of overall M and E Framework on FWBD-PCP • no standard monitoring and evaluation tool • under reporting of cases due to various reasons (e.g. concern of tourism being affected) • poor reporting system, with issues on reliability of data, lack confirmation • R/P/M/CESU staff are multi-tasked • no clear communication structure from CO/RO to LGU level • delayed/poor feedback mechanism • late communication of LGUs (problem at the lower level is already unmanageable)
Logistics	<ul style="list-style-type: none"> • limited supply of drugs/medicines • logistics support from DOH not enough
Multi-Sectoral Collaboration	<ul style="list-style-type: none"> • no clear guidelines established relative to collaborative work among concerned government agencies especially at the local level • agencies/stakeholders work in isolation based on their own mandate • no one to spearhead collaboration • participation of NGOs, private sector not maximized
Financing	<ul style="list-style-type: none"> • Lack of LGU fund • Small fund allocation • Financial constraints • Dependence on DOH for technical assistance and logistics • No etiologic cases, inadequate resources for diagnosis; not a priority
Regulations	<ul style="list-style-type: none"> • policies lack enforcements by the concerned agencies • licensing of food establishments not strictly implemented in some areas • proficiency of med techs on parasitology test not assured • efficient and appropriate management of specimen not in place or followed (e.g. labs lack capability to get specimen while still fresh to get the accurate source of the disease)

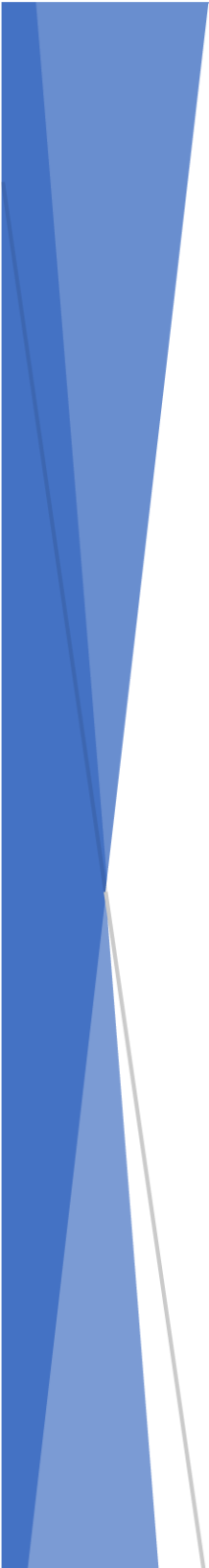
Source: NSP 2019-2023

1.2.4.2 National Strategic Plan Goals and Strategic Objectives

With these findings and challenges, in consultation with the different government partner agencies, the program developed the National Strategic Plan 2019-2023. A summary of the NSP vision, mission, goals and objectives is shown in Figure 5. Details of its strategies is fully discussed on the full document of the National Strategic Plan 2019-2023.

Fig.5 National Strategic Plan 2019-2023 Framework

Vision A food and waterborne disease free Philippines				
Mission To reduce the burden of FWBDs and outbreaks through evidence-based program management, behavior change, policy support, standards and guidelines development, efficient and well-trained program management and staff and resource mobilization initiatives.				
Goal Reduced morbidity and mortality due to FWBDs including outbreaks				
Objective 1 FINANCING – To secure sustainable investments to improve FWBD health outcomes and ensure efficient and equitable use of health resources for addressing FWBDs	Objective 2 SERVICE DELIVERY – To ensure the availability and accessibility of essential quality FWBD program health products and services at appropriate levels of care especially for priority population	Objective 3 REGULATION – To ensure availability of safe and high quality FWBD program health products, devices, facilities and services	Objective 4 GOVERNANCE – To ensure sustained supportive policy environment and functional structures for effective and participatory implementation and coordination of the FWBD program	Objective 5 PERFORMANCE ACCOUNTABILITY – To ensure accountability of different institutions, staff and health workers at all levels in the execution of FWBD policies and programs
Strategy 1 <i>Rationalize health spending for FWBD by delineating priorities among key actors including DOH Central Office, CHDs and LGUs</i>	Strategy 1 <i>Expand and capacitate facilities and service providers to deliver quality FWBD-PCP interventions and services</i>	Strategy 1 <i>Monitor food, water and sanitation practices through enforcement of national policies and appropriate technical standards</i> Strategy 2 <i>Regularly inform and educate the public and consumers on the safety, and quality of health goods and services</i> Strategy 3 <i>Explore integration of FWBD sentinel indicators in licensing and accreditation standards e.g. functional ORT corners in health facilities</i>	Strategy 1 <i>Create supportive policy environment at various levels and within the context of existing SDN and Local Investment Plans for Health</i>	Strategy 1 <i>Link financing, service delivery, regulation and governance of FWBD services to leverage LGU performance by using instruments such as Terms of Partnership, awards/recognition and performance grants</i> Strategy 2 <i>Conduct regular monitoring, performance monitoring review and assessment</i>
Strategy 2 <i>Expand PhilHealth Benefit Package for clients suffering from FWBDs</i>	Strategy 2 <i>Intensify the generation of demand for appropriate WASH practices and health seeking behavior towards FWBD services</i>		Strategy 2 <i>Streamline org. support for FWBD-PCP including clearly delineating roles and responsibilities among DOH Central Office, CHDs and LGUs</i>	
Strategy 3 <i>Mobilize funds from other sources</i>	Strategy 3 <i>Strengthen the delivery of FWBD services to vulnerable groups and identified high risk areas</i>		Strategy 3 <i>Improve systems for supply chain management of FWBD commodities</i>	
Strategy 4 <i>Prepare and update of a multi-year budgetary requirement to support the implementation of the strategic plan for FWBD-PCP</i>	Strategy 4 <i>Strengthen FWBD surveillance and response, monitoring evaluation, and reporting</i>		Strategy 4 <i>Ensure conduct of research to generate and use evidence in policy dev., decision making and program planning and implementation</i>	
	Strategy 5 <i>Ensure uninterrupted provision FWBD services during times of disasters and emergencies</i>		Strategy 5 <i>Harness participation and contributions of multi-sectoral partners</i>	



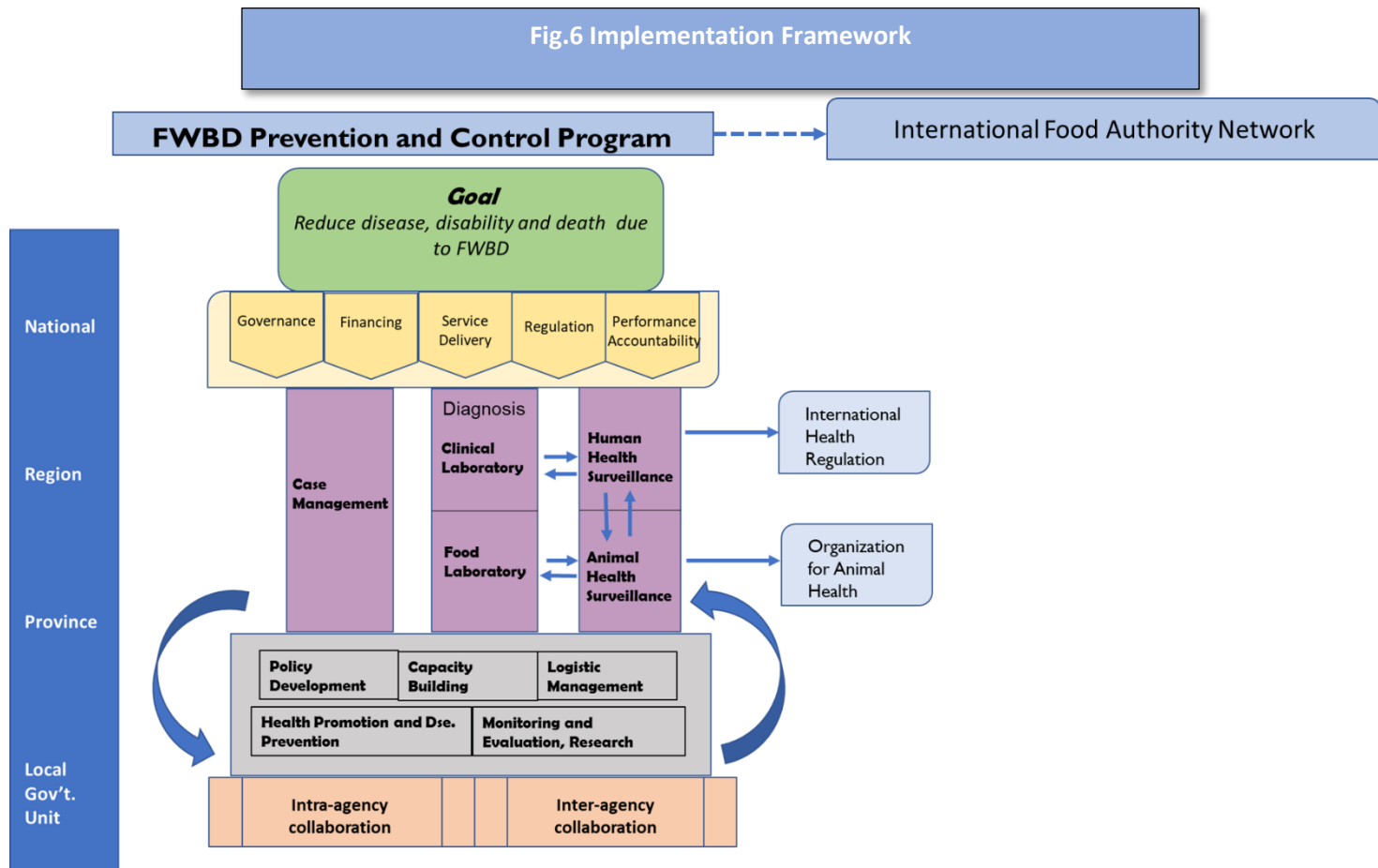
Section II: Implementation Arrangement

This section discusses the:

- Implementation Framework
- Multi-sectoral Collaboration
- Roles and Responsibilities of government agencies involved in the prevention and control of FWBD

2.0 Implementation Arrangement

2.1. Implementation Framework



The over-all goal of the program is to reduce disease, disability and death caused by food and water-borne diseases (focusing on bacteria, virus, and foodborne helminths). In achieving this goal, the FWBD-PCP implementation framework (Figure 6) aligns with the five objectives of the NSP (2019-2023) that addresses governance, financing, service delivery, regulation and performance accountability. The nine program components, as stated in the **Guidelines on the Implementation of the Food and Water-borne Diseases Prevention and Control program**, will help achieve the five objectives. Each component may involve two or more agencies working together to achieve the desired change in reducing morbidity and mortality from food and water-borne diseases

These components are the following:

1. **Case Management** focuses on the treatment and management of cases.
2. **Laboratory Diagnosis** refers to the to the collection, submission and processing of specimen for confirming the etiologic agent of the food and water-borne disease.
3. **Surveillance** refers to the reporting of human cases and animal health conditions that may also cause the disease in man.
4. **Policy development** focuses in the development and implementation of policies/guidelines that will help in the achievement of the program objectives.
5. **Capacity building** provides the necessary knowledge and skills to health worker to provide the necessary services of the program and proper reporting.
6. **Health Promotion** and disease prevention refers to program activities that advocate for support (policies and resources) and adapting preventive behavior.
7. **Logistic Management** refers to the availability of drugs and supplies needed routinely by the program and during outbreaks and other health emergency situations.
8. **Monitoring and Evaluation (includes research)** pertains to tracking of program activities and indicators which will indicate the achievement of program objectives.
9. **Intra and inter-agency collaboration** focuses on the interaction and collaboration of the different agencies within and outside the Department of Health to achieve the program objectives.

Components 4-8 (policy development, capacity building, health promotion, logistic management and monitoring and evaluation) supports across case management, laboratory diagnosis and surveillance. On the other hand, changes in technology, treatment regimen, trends and emergence of new diseases affects or will redefine components 4-8.

Intra and inter-agency collaboration is the ground for the interplay of the other components wherein various agencies need to work together to be able to achieve the program goal.

Also, the nine components work across the different structure of the government from the devolved local government units (City/Municipality, Provinces) to the National level.

Moreover, the program deals with diseases covered by international health regulation. Thus, the program output both covers commitment to national and international community.

2.2. Multi-sectoral Collaboration

The development of a food and waterborne diseases may occur at any point in the food production pathway as mentioned in Section 1.3.1. Various risk areas for contamination and adulteration of raw or cooked food/water may occur from the production until a consumer takes in the food and water. Thus, various agencies work together in the prevention and control of food and water-borne diseases. It is the mandate of the program, as stated in the **Administrative Order 29 - Collaboration with different DOH agencies and other government and non-government agencies in implementing prevention and control activities**, to lead the interaction and collaborative efforts of the different agencies contributing in the prevention and control of FWBD.

What is multi-sectoral collaboration in the control and prevention of food and water-borne diseases?

Multi-sectoral collaboration is a process wherein multiple sectors work together to achieve common objectives, goals and tasks with shared responsibility. For food and water-borne diseases, it involves staff from the public health surveillance and response sector, food safety sector, animal health sector, environmental health and other relevant sectors.

Multi-sectoral collaboration refers to the effective operation of the intra- and inter-agency collaboration component of the program. Each component may involve two or more government agencies. The examples below illustrate the interplay of specific agencies in the different components of the program:

1. Case Management involves hospitals (retained and devolved) and health facilities. Improvement and maintenance of local health facilities (includes staffing) is under the local government administration. However, Health Facilities and Services Regulatory Bureau-HFSRB oversees the assessment and accreditation of these health facilities. PhilHealth provides the health care financing for certain FWBDs (such as acute gastroenteritis, cholera and Typhoid Fever). The list of FWBDs covered by the PhilHealth may expand to include other FWBDs.

Case Management also includes the preventive public health measures (WASH). ERDD develops the national policies and guidelines on sanitation which are being implemented at the local government units (Municipalities and cities). Regional and provincial health offices supervise and monitor the implementation. The Family Health

Office provides policies and guidelines on the integration of FWBD policies and activities in maternal and child care.

2. Laboratory Diagnosis involves hospital laboratories (regional) and National Reference Laboratories (RITM) and FDA. Agencies working on animal Health (BAI, NMIS, BFAR, etc.) perform laboratory testing on food and food products.

3. Surveillance and outbreak response function is the mandate of the Epidemiology Bureau. However, the reporting process involves the LGU, and Provincial Health Office, Regional Health. Other agencies such as the Bureau of Quarantine, RITM and other National Referral Laboratories perform laboratory testing related to surveillance activities. Agencies working on animal surveillance (Department of Agriculture, BFAR) complete the whole surveillance process. Any positive findings shall be reported to Epidemiology Bureau (EB) which is also the focal office for International Health Regulation.

The Health Emergency Management Bureau (HEMB) collaborates with the program during human-crisis situations (disasters, siege) wherein food and water-borne diseases become a health problem in such situations.

4. National agencies develop policies in relation to the prevention and control food and water-borne diseases. However, devolved health offices and facilities may develop internal guidelines that will strengthen implementation of program activities such as referral process of patients from community, integrated logistics management, infection control guidelines.

5. Capacity building pertains to formal training wherein training modules are developed by national technical experts; but the regional and provincial offices conduct the actual training.

6. Health Promotion and disease prevention: development of posters and training guide involves national DOH (FWBD-PCP and HPCS). However, promotion of personal hygiene practices may include the Department of Education and DSWD. Regional, Provincial and local health offices may also be involved in health promotion activities.

7. Logistic Management involves the different health structure from the national to the local units.

8. Monitoring and Evaluation, research involves regional and national health offices.

DPO No. 2017-5438 provided the mechanism by which the multi-sectoral collaboration can function effectively. The DPO also states the creation of a Steering committee,

Expert Panel and Technical Working Group for FWBD (Annex D). The composition and functions are stated in the DPO. The Steering committee provides the over-all oversight of the FWBD-PCP and recommends to the Secretary of Health the approval of all technical outputs.

The Expert Panel reviews policy issuances and strategies and all technical products of the program.

The FWBD Technical Working Group was created and becomes the arm for the program collaborative function. The TWG will be chaired by the Program Manager. The co-chairman may rotate among the different partner agencies. The TWG will meet on the 2nd week of each quarter (coinciding with the quarterly reporting period of the department). During the meeting each agency will present accomplishments (in terms of planned activities and specific indicators) and updates on new technology; findings during supervisory visits; and issues that need the decision of the TWG in relation to FWBD. The TWG shall also be the venue to discuss any policy, financing and regulation agenda of the program. It will be a venue to discuss programmatic issues and be resolved as a group. The chair may convene special meetings if there are urgent issues requiring decision from the group.

2.3. Roles and Responsibilities

Clear delineation of functions and responsibilities will lessen tasks not being implemented or encroaching on each other function resulting to duplication of tasks. The roles and responsibilities stated in this MOP was taken from the new AO: Guidelines on the Implementation of the Food and Water-borne Disease Prevention and Control program.

2.3.1 Department of Health Central Office

Pertains to Department of Health agencies/attached agencies at the central office whose functions may contribute in the prevention and control of food and water-borne diseases.

2.3.1.1 Disease Prevention and Control Bureau (DPCB)

The DOH-DPCB shall be responsible for the overall execution of the policy and guidelines.

- a. Overall management and coordination of the FWBD-CP. It takes the lead in setting the overall direction and focus of the Program.
- b. Formulate and disseminate national policies and guidelines governing the management and implementation of the FWBD-PCP;
- c. Develop strategic plans and cascade these to the CHDs for adoption;
- d. Ensure the provision/delivery of quality diagnosis, management and treatment services of FWBDs;
- e. Design and facilitate the conduct of training on various components of the program;
- f. Manage the logistics requirements of the Program and secure logistics support;
- g. Establish partnership with other national government agencies and other partners in the private sector;
- h. Maintain and regularly update a directory of FWBD focal persons from DOH-CHDs, provinces, municipalities/cities as well as partner agencies; strengthen coordination and linkages with RO focal persons
- i. Coordinate with related offices/agencies on any outbreak due to FWBDs such as EB for surveillance and monitoring, HEMB for logistic augmentation, Environmental Related Disease Division for immediate action on water and sanitation, DA for diseases that may be attributed to contamination of animals and plants and BFAR for contamination of seafood products;
- j. Coordinate with other DOH offices in promoting WASH practices and key messages on prevention and control of FWBDs;
- k. Undertake monitoring and evaluation of the status and performance of the FWBD-PCP

2.3.1.2 Environmental Related Diseases Division (ERDD)

- a. Provide technical assistance to the regions and LGUs to comply with the provisions and requirements of the Sanitation Code of the Philippines;
- b. Formulate and promote policies and guidelines in promoting increased access to safe water and sanitation services;
- c. Design strategic approaches to achieve zero open defecation areas nationwide;
- d. Augment logistics for water testing facilities;
- e. Coordinate with the Department of Environment and Natural Resources (DENR) and Department of Agriculture (DA) for interventions that will support the prevention and control of FWBDs.

2.3.1.3 Family Health Office (FHO) Women and Men's Health Development Division and Children's Health Development Division

- a. Formulate/Update policies, guidelines and standards in improving IYCF, nutrition and IMCI practices;
- b. Provide technical assistance to the DOH Regional Offices, Provincial DOH Offices (PDOHOs), and LGUs to comply with the relevant child health policies and guidelines in support of the FWBD-PCP;
- c. Integrate guidelines on hand washing, sanitation and hygiene practices in maternal and newborn care, infant and young child feeding, early child development, oral health, nutrition, integrated management of childhood illness, and management of acute malnutrition.

2.3.1.4 Epidemiology Bureau (EB)

- a. Maintain and strengthen FWBD surveillance nationwide;
- b. Generate timely FWBD surveillance reports and disseminate to concerned DOH offices and other agencies;
- c. Inform/communicate with FWBD-PCP and other offices concerned of any impending FWBD outbreaks;
- d. Generate timely FWBD surveillance reports and disseminate to concerned DOH offices;
- e. Provide technical assistance to RESUs/LGUs in the investigation, declaration and termination of outbreaks;
- f. In coordination with the FWBD-PCP, as the International Health Regulations National Focal Point Office, EB shall immediately notify the WHO when the assessment of an event indicates that the FWBD event is notifiable pursuant to paragraph 1 of Article 6 and Annex 2 and to inform WHO as required pursuant to Article 7 and paragraph 2 of Article 9 of the IHR 2005 (Annex E)

2.3.1.5 Health Emergency Management Bureau (HEMB)

- a. Provide technical assistance in developing plans in times of emergencies and disasters;
- b. Coordinate the mobilization of WASH resources to ensure adequate and safe water through water quality surveillance, disinfection/treatment in coordination with DPCB-ERDD;

- c. Support in the augmentation of logistics to FWBD to respond to emergencies, disaster and outbreaks.

2.3.1.6 Health Promotion and Communication Services (HPCS)

- a. Formulate and design a health promotion and communication plan to address FWBDs;
- b. Develop key messages for various groups of audiences relative to the prevention and control of FWBDs;

2.3.1.7 Bureau of Quarantine (BOQ)

- a. Develop and ensure compliance to protocols and field operation guidelines on entry/exit management of persons, conveyances and goods in coordination with airport and port of entries;
- b. Conduct surveillance in ports and airports of entry and sub ports as well as the airports and ports of origin of international flights and vessels;
- c. Monitor public health threats in other countries including food related public health threats;

2.3.1.8 Research Institute for Tropical Medicine (RITM) and National Reference Laboratories (Parasitology, Bacterial Enteric Diseases, Rotavirus and Other Enteric Viruses and Surveillance and Response Unit)

- a. Perform confirmatory laboratory testing for human samples referred for the FWBD surveillance and outbreak investigation (e.g. stool, sputum, blood, urine);
- b. Provide technical support for collection, transport and storage of specimen for the disease reporting unit;
- c. Provide training on lab diagnosis of FWBD pathogens and quality assurance to the regional laboratories;
- d. Provide line-list of laboratory results to EB and RESU, and individual laboratory results to the RESU, in the form of transmittals (for distribution to the DRUs);
- e. Perform further studies to determine other etiologies of FWBD;
- f. Conduct laboratory surveillance for the FWB pathogens;
- g. Conduct RDT validation for the FWBD.

2.3.1.9 Food and Drug Administration (FDA)

- a. Perform microbiologic tests on processed food samples submitted to the laboratory;
- b. Provide EB with a report of etiologic agents of food and waterborne diseases on food samples tested;
- c. Monitor the safety of pre-packaged food in the market and issue Public Advisory / Warning to prevent consumption of contaminated food;
- d. Undertake surveillance of microbiologic agents of food and water-borne diseases which are transmissible to humans;
- e. Alert the DOH offices in cases of unusual increases in the number of reported organisms known to cause FWBDs in humans;

2.3.2 Department of Health Central Office – Center for Health Development

2.3.2.1 Infectious Disease Prevention and Control Cluster

- a. Disseminate national policies and guidelines governing the management and implementation of the FWBD-PCP;
- b. Develop regional plans on FWBD and ensure inclusion of budgetary requirements for FWBD in their respective WFPs;
- c. Augment logistics support to LGU and health care facilities;
- d. Assist RESU, HEMB, and EOH in FWBD outbreak investigation and response;
- e. Coordinate with the regional Environmental Health unit on the implementation of the FWBD-PCP;
- f. Coordinate with other partners in the region for the management of the FWBD-PCP;
- g. Facilitate in the conduct of training related to FWBD-PCP to local government units;
- h. Develop research proposals addressing FWBD concerns for submission to PCHRD in coordination with FWBD PCP and HPDPB;
- i. Monitor and evaluate the implementation of the program at the LGU

2.3.2.2. Regional Laboratories

- a. Perform laboratory testing of samples (bacterial, viral and parasitic) from FWBD cases referred by the disease reporting units, as well as from cluster/outbreak investigations;
- b. Participate in monitoring and evaluation visits by the DOH FWBD Monitoring team;
- c. Participate in the laboratory quality assurance program;
- d. Provide laboratory results to the National Reference Laboratories and RESU, and coordinate with the NRLs for technical concerns (specimen collection, transport, storage, testing and troubleshooting)
- e. Perform direct fecal smear, modified acid-fast staining, formalin ether concentration technique, Kato-Katz and RDT for detection of food-borne helminths
- f. Send isolates for confirmatory testing

2.3.2.3 Regional Epidemiology and Surveillance Unit (RESU)

- a. Regions to receive and collate data base reports from the LGUs and hospitals; they should ensure completeness and timeliness of reports from the LGUs and hospitals;
- b. Provide technical assistance to LGUs (ESUs) in the conduct of outbreak investigation;
- c. Coordinate and facilitate submission of samples;
- d. Conduct weekly analysis of FWBD data and submit weekly report to EB on notifiable diseases;
- e. Immediate reporting through ESR if there is an outbreak or clustering of cases
- f. Notify EB as the International Health Regulations (IHR) National Focal Point Office when the assessment of an event indicates a food or waterborne disease event that is notifiable pursuant to paragraph 1 of Article 6 and Annex 2 and to inform WHO as required pursuant to Article 7 and paragraph 2 of Article 9 of IHR.

2.3.2.4 Family Health Cluster [WMDD and CHDD]

- a. Disseminate national policies, standards and guidelines on child health and nutrition in support the FWBD-PCP;
- b. Support the Infectious Disease Cluster in the development of integrated local plans on child health and nutrition to implement and cascade FWBD-PCP to LGUs;
- c. Provide complementary child health and nutrition capacity development activities that will support effective implementation of FWBD-PCP to local government unit;
- d. Provide technical assistance on MNCHN that will also complement implementation of FWBD-PCP to LGU;
- e. Monitor and evaluate the MNHCN-related indicators and variables related to the implementation of the FWBD-PCP to LGU;
- f. Coordinate with the Regional Environmental and Occupational Health on the implementation of the FWBD-PCP.

2.3.2.5 Environmental and Occupational Health Unit

- a. Provide technical assistance and training to LGUs to increase households with access to safe water, sanitary toilet, and achievement of zero open defecation;
- b. Assist in the investigation n of FWBD Outbreaks;
- c. Support campaign of prevention and control of FWBD;
- d. Monitor the implementation of LGU's preventive measures for FWBD;
- e. Augment logistics support to LGUs

2.3.2.6 Health Education and Promotion Unit

- a. Implement health communication plan;
- b. Localize key messages for various groups of audiences relative to the prevention and control of FWBDs; and
- c. Participate in the conduct of FWBD training

2.3.2.7 Provincial DOH Office (PDOHO)

- a. Ensure adoption of DOH policy by LGU through ordinances;
- b. Advocate for LCEs' support and encourage LGUs to provide funds/budget for FWBD-PCP through inclusion in the Local Investment Plan for Health;
- c. Facilitate the provision of logistics / funds to EOH for FWBD prevention campaign;
- d. Assist in the investigation and outbreak response
- e. Monitor implementation of FWBD and submit regular reports to the RD cc FWBD Coordinator

2.3.3 Other Government Agencies

2.3.3.1 Department of Interior and Local Government (DILG)

- a. Support the DOH and DA in the collection and documentation of food-borne illness data, monitoring and research;
- b. Provide budget allocation for capacity building of LGU health workers
- c. Endorse LGU health workers to participate in training programs, standards development and other food safety activities to be undertaken by the DA, DOH and other concerned national agencies.
- d. Recommend to LCEs to adopt and support FWBD-PCP initiatives.

2.3.3.2 Department of Education

- a. Integrate messages on proper water, food and sanitary practices including personal hygiene in the school curriculum;
- b. Support and expand the implementation of WASH in schools and school feeding programs.

2.3.3.3 Department of Agriculture

- a. Alert the DPCB, FWBD and EB in cases of unusual increase in the number of reported organisms known to cause foodborne disease in humans;
- b. Develop and transfer technologies to LGUs to improve and sustain the development of the plant, livestock and aquaculture industry which ensure food security and competitiveness of the local produce in the global market;
- c. Inform and share with DOH of new technologies related to FWBD;
- d. Plan, coordinate and implement research and development programs in support to food safety;
- e. Coordinate with FDA regarding all laboratory confirmations involving foodborne disease with outbreak potential;
- f. Develop and implement standards on good practices for the prevention of FWBDs

2.3.3.4 Department of Social Welfare and Development

- a. Ensure proper water, food and sanitary practices including personal hygiene of DSWD residential/day care centers, canteen, caterers;
- b. Support and expand implementation of hand-washing practices during feeding programs

2.3.3.5 Department of Environment and Natural Resources

- a. Control the construction and maintenance of waterworks, sewerage, and sanitation systems and other public utilities;
- b. Prohibit dumping of waste products detrimental to the plants and animals or inhabitants therein;
- c. Prohibit dumping of wastes or debris in an exposed or unsanitary condition on the ground or in bodies of water;
- d. Raise awareness on the importance of maintaining reliable and effective treatment of wastewater;
- e. Endeavour to achieve social justice by ensuring the integrity of our ecosystems on which local communities depend for food and livelihood;
- f. Strive to recycle wastewater to benefit communities and not to allow untreated wastewater that will harm people.

2.3.3.6 Local Government Units

The LGUs are primarily responsible for the delivery of quality FWBD diagnosis, management and treatment and conduct of preventive and control interventions at the local level. Specifically, the LGUs shall:

- a) Translate national policies on FWBD into local ordinances e.g. regulating ambulant vendors;
- b) Train food handlers;
- c) Strengthen inspection of food establishments for compliance to sanitation requirements;
- d) Ensure household access to safe drinking water and sanitation facilities;
- e) Establish water treatment system during emergencies and disasters;
- f) Maintain and sustain a functional local epidemiology and surveillance units;
- g) Ensure the availability of trained health care personnel;
- h) Ensure functional ORT corner and availability of ORS in health care facilities;

- i) Fill-up laboratory request forms and submit appropriately labeled specimens from patients and samples of suspected food/water vehicle to the appropriate DOH or DA laboratory for microbial tests;
- j) Collate and submit epidemiologic data on the occurrence of Salmonellosis and other food/water-borne infection to EB;
- k) Submit monthly reports of FWBD to RESU;
- l) Notify RESU when the assessment of an event indicates a food or waterborne disease event that is notifiable pursuant to paragraph 1 of Article 6 and Annex 2 and to inform WHO as required pursuant to Article 7 and paragraph 2 of Article 9 of IHR;

2.3.3.7 Health Care Facilities

- a. Diagnose, manage and prevent FWBDs based on CPGs;
- b. Provide health promotion and education on exclusive breastfeeding, complementary breastfeeding, safe water, proper sanitation, and good hygiene practices (oral health, proper hand washing);
- c. Re-establish oral rehydration solution stations integrated for diarrhea, dengue and leptospirosis;
- d. Report FWBD cases to local epidemiology and surveillance units;
- e. Conduct of death review for FWBD cases;
- f. Ensure availability of FWBD supplies/commodities;
- g. Request for basic laboratory work-up in case of complications;
- h. Give appropriate anti-microbial if indicated;
- i. Encourage the use of oral rehydration solution and oral zinc sulfate as soon as patient can tolerate;
- j. Observe proper hydration and monitoring of hemodynamic status;
- k. Refer appropriately to specialists/sub-specialist if needed;
- l. Give IEC materials to patients

2.3.3.8 Other Laboratories

(Definition based on the Licensing)

- a. Tertiary Laboratories – Perform direct fecal smear, bacteriological culture, modified acid-fast staining, formalin ether concentration technique, Kato-Katz and RDT for detection of FWB parasites;
- b. Secondary Laboratories – Perform direct fecal smear, Kato-Katz and modified acid-fast staining for detection of FWB parasites;
- c. Primary Laboratories – Perform direct fecal smear, Kato-Katz and modified acid-fast staining for detection of FWB parasites



Section III: Case Management

This section provides the guide on:

- Detecting diarrhea case
- Assessing the dehydration level
- Management of cases
- Preventive measures

The Clinical Practice Guideline is the main reference of this section. This section provides a guide to health worker (in the community or facility) on the actions (assessing, treating or referring) to be taken upon finding the diarrhea case.

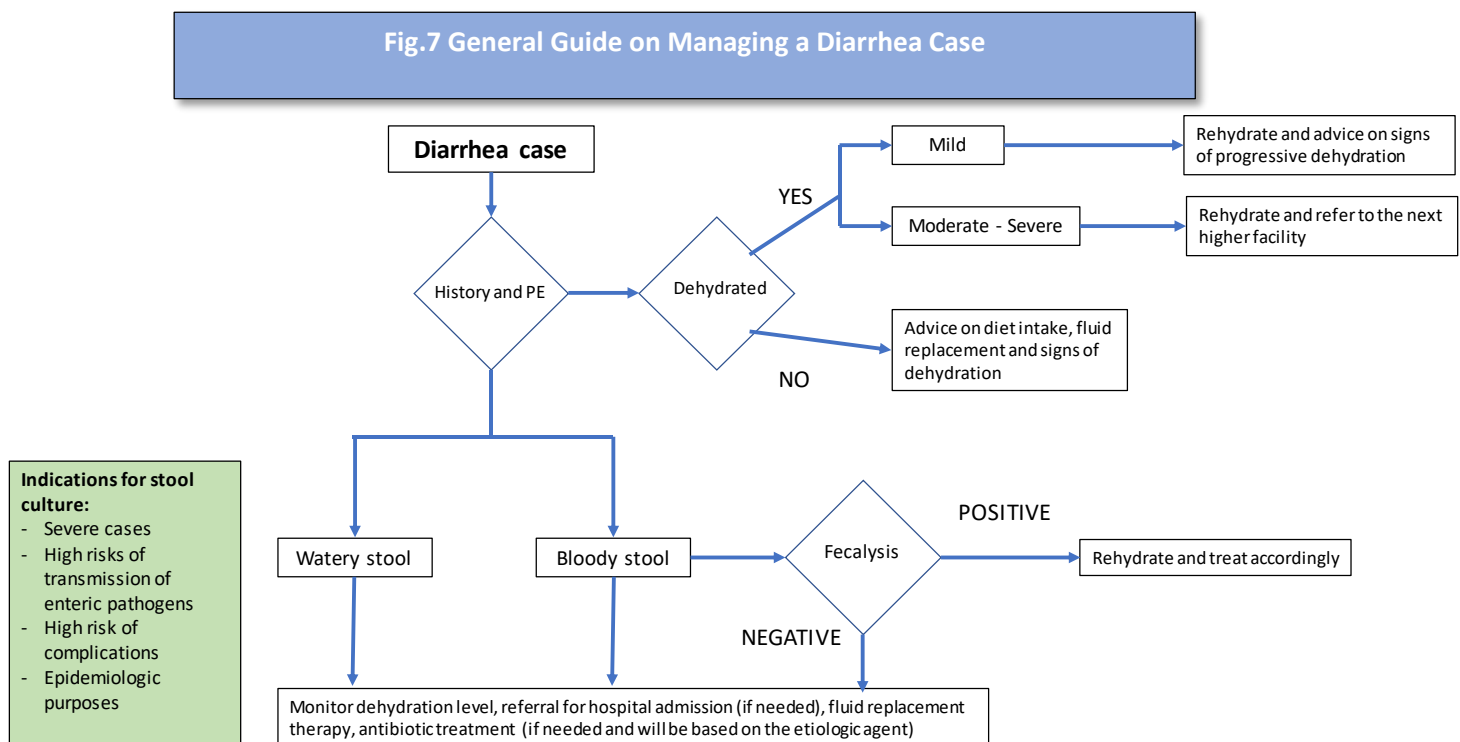
3.0 Case Management and Prevention

3.1 Detecting Diarrhea Case

The most common symptom of food and water-borne diseases is diarrhea. And the most threatening consequence of diarrhea is dehydration. Diarrhea causes loss of water and electrolytes in the body which can lead to complications and death. Thus, it is important for health workers to be able to detect diarrhea cases early and provide appropriate actions.

A diarrhea case may be detected in the **community/facility** by a barangay health worker (BHW). During the initial encounter, basic information obtained, such as when the condition started, the characteristic of the stool (watery or bloody), from the patient and the assessment of the patient's physical condition. The barangay health worker (BHW) should also be able to assess the level of dehydration, provide advice and refer the patient to the facility for further evaluation.

Figure 7 provides a guide for health worker on how to proceed when a diarrhea case is seen whether in the community or health facility.



Note: For watery diarrhea and a high suspicion of cholera, RDT (Rapid diagnostic test) can be done (if available) and/or C&S testing of the stool specimen.

3.2 Assessment of Dehydration

Always assess the level of dehydration of the patient as part of the physical examination. Keep in mind that the clinical manifestations of dehydration for children is different from adults.

A trained BHW should be able to assess the level of dehydration of children with diarrhea seen at the community using parameters 2,3, 4,5. Any sign of Moderate to Severe dehydration should be referred for further evaluation and management to a health facility. Table 3 provides a summary of clinical manifestations for children.

(Source: Philippine Clinical Practice Guidelines on the Management of Acute Infectious Diarrhea).

Table 3. Clinical Manifestation of Diarrhea in Children According to the Level of Dehydration

Parameters		No signs of dehydration	Mild to Moderate Dehydration	Severe Dehydration
1.Fluid deficit (% body weight)	Infant	< 5%	5-10%	>10%
	Child	3%	6%	9%
2. General condition*		Well; alert	Restless; irritable	Lethargic; Unconscious
3. Thirst		Drinks normally; not thirsty	Thirsty; drinks eagerly	Drinks poorly; not able to drink
4. Fontanel/Eyes*		Normal	Slightly depressed/ slightly sunken	Sunken
5. Tears		Present	Present or decreased	No tears
6. Cutaneous perfusion/ capillary time		< 2 seconds	Around 2 seconds	< 3 seconds
7. Respiration		Normal	Deep, may be rapid	Deep and rapid 2 months-12 months: ≥ 50 breaths per minute > 1 year – 5 years: > 40 breaths per minute
8. Skin pinch*		Goes back quickly	Goes back slowly	Goes back very slowly
9. History of urine output		Normal	Decreased (< 0.5 ml/kg/hr. in 8 hours)	Minimal (< 0.3 ml/kg/hr. in 16 hours) or None (no urine output in 12 hours)
Interpretation			The presence of two or more of the above signs	The presence of two or more of the above signs

*These parameters are unreliable for patients with severe malnutrition. (CPG, 2018)

Level of dehydration for adult patients should also be assessed early on the course of the disease to prevent complications or death. Table 4 provides a guide in assessing the level of dehydration of adult patients.

Table 4. Clinical Manifestation of Diarrhea in Adults According to the Level of Dehydration

Parameters	Mild Dehydration	Moderate Dehydration	Severe Dehydration	
Fatigue	+/-		+	+
Thirst	+/-		+	+
Sunken eyes	-		+	+
Blood pressure	Normal		Orthostatic Hypertension	Shock
Respiratory rate (breaths per minute)	Normal		21-25	➤ 25
Heart rate (beats per minute)	≥ 80		≥ 100	Faint or thread pulse
Peripheral circulation	Warm extremities		Cold, clammy skin	Cold, clammy skin
Level of consciousness	Alert		Lethargic	Coma or stupor
Oral mucosa	Moist		Dry	Dry
Muscle weakness	None		Mild to moderate	Severe
Skin turgor	≤ 2 seconds		≥ 2 seconds	≥ 2 seconds
Capillary refill time	≤ 2 seconds		≥ 2 seconds	≥ 2 seconds
Urine output (ml/kg/hour)	≥ 0.5		≤ 0.5	≤ 0.5

Other parameters for assessing dehydration in adults is listed in the CPG manual.

3.3 Management of Diarrhea Case

3.3.1 Fluid Replacement Therapy

Fluids and electrolyte replacement are the basic treatment of diarrhea to prevent death.

3.3.1.1 Fluid Replacement in Children

The CPG recommends the admission of children with acute infectious diarrhea with the following conditions:

- ✚ Children who are not able to tolerate oral fluids;
- ✚ Children suspected of electrolyte imbalance;
- ✚ Children with the following physical findings on examination: altered consciousness, abdominal distention; respiratory distress; hypothermia (body temperature of < 36 degrees Celsius);
- ✚ Children with co-existing medical conditions such as pneumonia, meningitis/encephalitis, sepsis, moderate to severe malnutrition, and suspected surgical condition

According to the FWBD CPG Reference manual, the recommended rehydration therapy for children based on the level of dehydration is provided in Table 5.

Table 5. Rehydration Guide For Children According to the Level of Dehydration

No dehydration	Mild to Moderate dehydration	Severe dehydration
Reduced osmolarity oral rehydration solution (ORS) is recommended to replace ongoing losses If commercial ORS is not available, homemade ORS may be given (4-5 teaspoons of sugar and 1 teaspoon of salt in 1 liter of clean drinking water).	Reduced osmolarity ORS is recommended to replace ongoing losses. If oral rehydration is not feasible, administration of ORS via nasogastric tube is preferred over IV hydration.	Rapid intravenous rehydration is recommended with plain Lactated Ringer's (LR) solution or 0.9% Sodium Chloride (with or without 5% glucose).
RHU Level	Hospital Level	Hospital Level

3.3.1.2 Fluid Replacement in Adult

According to CPG, if the following conditions are present in an adult patient, referral for hospital admission is highly recommended:

- ✚ Inability to tolerate oral rehydration;
- ✚ Moderate to severe dehydration;
- ✚ Acute Kidney injury;
- ✚ Presence of electrolyte abnormalities;
- ✚ Co-morbid conditions such as uncontrolled diabetes, congestive heart failure, coronary artery disease, chronic kidney disease, chronic liver disease, immunocompromised conditions;
- ✚ Weak or elderly patients (≥ 60 years old);
- ✚ Poor nutritional status;

In the FWBD CPG Reference Manual provides the guide for fluid replacement in adults is shown in Table 6. The recommended fluid for hydration and resuscitation of diarrhea patients is Plain Lactated Ringer's Solution (PLRS), a chloride restricted intravenous fluid. If this is not available, plain normal saline solution may be used.

Table 6. Recommended Rehydration Guide For Adults According to the Level of Dehydration

Mild dehydration	Moderate dehydration	Severe dehydration
Oral rehydration solution is recommended at 1.5 - 2 times the estimated amount of volume deficit plus concurrent gastrointestinal losses.	For Admitted Patients: 500 to 1,000 ml of plain Lactated Ringer's solution (PLRS) in the first 2 hours is recommended. Once hemodynamically stable, give ✚ 2-3 ml/kg/hour PLRS for patients with actual or estimated body weight of <50 kg;	For Admitted Patients: 1,000 to 2,000 ml of PLRS within the first hour is recommended. Once hemodynamically stable, give ✚ 2-3 ml/kg/hour PLRS for patients with actual or estimated body weight of <50 kg

Mild dehydration	Moderate dehydration	Severe dehydration
	<ul style="list-style-type: none"> 1.5-2 ml/kg/hour PLRS for patients with actual or estimated body weight of >50 kg; Use ideal body weight for overweight or obese patients; Replace ongoing losses volume per volume with PLRS boluses or ORS (if tolerated). 	<ul style="list-style-type: none"> 1.5-2 ml/kg/hour PLRS for patients with actual or estimated body weight of >50 kg. Use ideal body weight for overweight or obese patients. <p>Replace ongoing losses volume per volume with PLRS boluses. ORS is not recommended since patients with severe dehydration may have compromised mental status and therefore have high risk for aspiration.</p>

Note: Sport drinks and sodas are not recommended to replace fluid losses. Elderly patients and those at risks of fluid over load (patients with heart failure or kidney disease) should be referred to a specialist for individualized fluid management.

3.3.2 Anti-microbials and Other Adjunctive Therapy

3.3.2.1 Children

Conditions in children wherein anti-microbials are indicated:

- Suspected cholera;
- Bloody Diarrhea;
- Presence of other acute infections such as pneumonia, meningitis

Antibiotic treatment should not be given routinely in children. Table 7 provides the recommended treatment.

The FWBD CPG Reference Manual provides the following position for adjunctive therapy:

Zinc supplementation is given for acute infectious diarrhea in children more than 6 months old at a dosage of 20 mg/day for 10-14 days. This adjunctive therapy shortens the duration of diarrhea and decreases the frequency of stool. Zinc supplementation is not routinely given to children less than 6 months of age.

Probiotics is recommended adjunctive therapy because it reduces the severity of the symptoms and duration of diarrhea. Probiotics are given within the duration of diarrhea and may extend for another 7 days after the completion of the antibiotics. Specific probiotics are listed in the FWBD CPG Reference Manual.

Table 7. Recommended Microbial Treatment For Children

Etiologic agent	Antimicrobial
Suspected or confirmed cholera	<p>Azithromycin 10 mg/kg/dose once a day for 3 days, or 20mg/kg single dose (max dose: 500 mg/24 hours)</p> <p>Doxycycline (use only for > 8 years old): 2mg/kg single dose (max dose: 100 mg/dose)</p> <p><i>Alternatives (when susceptible) include:</i></p> <ul style="list-style-type: none"> ✚ Co-trimoxazole 10mg/kg/day of trimethoprim and 50 mg/kg/day of sulfamethoxazole twice a day for 5 days (max dose: 160mg/dose) OR ✚ Chloramphenicol 50-100 mg/kg/day every 6 hours for 3 days (max dose: 750 mg/dose) OR ✚ Erythromycin 12.5 mg/kg/dose every 6 hours for 3 days (max dose: 4g/24 hours)
Suspected or culture-proven <i>Shigella</i> dysentery	<p>Ceftriaxone IV 50-100 mg/kg/day every 12-24 hours (max dose: 2g/24 hours) for 2-5 days</p> <p>Ciprofloxacin 30 mg/kg/day divided into 2 doses x 3 days (max dose: IV 800 mg/24hours).</p> <p>Azithromycin 10 mg once a day for 3 days (max dose: 500mg/dose)</p>
Non-typhoidal <i>Salmonella</i> (NTS)	<p>Antibiotic treatment is NOT recommended for children with non-typhoidal <i>Salmonella</i> EXCEPT in high-risk children to prevent secondary bacteremia, such as:</p> <ul style="list-style-type: none"> ✚ Neonates or young infants <3 months old ✚ Immunodeficient patients ✚ Anatomical or functional asplenia, corticosteroid or immunosuppressive therapy, inflammatory bowel disease, or achlorhydria
Amoebiasis	<p>Metronidazole 10 mg/kg/dose 3 times a day (max dose: 750 mg/dose) for 5 to 10 days is recommended for confirmed cases of amoebiasis to prevent relapse.</p>

3.3.2.2 Treatment for Adults

Empiric microbial treatment refers to the giving of antibiotic treatment without identifying the etiologic cause of the acute infectious diarrhea. The decision is based on clinical experience. The CPG manual recommends empiric microbial treatment for adults with acute diarrhea and concomitant moderate to severe dehydration plus the following clinical manifestation: fever alone, fever and bloody stools, or symptoms persisting for more than 3 days. The recommended microbials are:

- + Azithromycin 1-gram single dose, or
- + Ciprofloxacin 500 mgs. twice daily for 3-5 days;

The above microbial treatment will be modified upon confirmation of the suspected microorganism according to the recommended antibiotics in Table 8.

Table 8. Recommended Microbial Treatment for Adults

Etiologic agent	Antimicrobial
Suspected or confirmed cholera	+ Azithromycin 1 g single dose + Ciprofloxacin 1-2 g single dose or 500 mg twice a day for 3 days Alternative: Doxycycline 100 mg twice a day for 3 days
Suspected or culture-proven <i>Shigella</i> dysentery	+ Ceftriaxone 1 g once a day for 5 days OR + Ciprofloxacin 500mg twice a day for 5 days; OR + Azithromycin 1 g single dose Once culture results are available, antimicrobial therapy can be modified accordingly.
Suspected or confirmed non-typhoidal <i>Salmonella</i>	+ Ciprofloxacin 500 mg twice a day for 5 days + Ceftriaxone 1 g IV once a day for 5 days Once culture results are available, antimicrobial therapy can be modified accordingly.
Confirmed amoebiasis	+ Metronidazole 500-750 mg tablet three times a day for 10 days + Alternative: Tinidazole 2 g once a day for 3 days, or secnidazole 2 g single dose + Diloxanide furoate 500 mg three times a day may be added to metronidazole, if available.

Racecadotril (100 mg three times a day) may be given to decrease the frequency and duration of diarrhea.

Note: Complications of acute infectious diarrhea in adults (acute kidney injury, hyponatremia or hypernatremia, hypokalemia or hyperkalemia) can be life threatening and immediately refer the patient to a specialist. Hospitalization and close monitoring are needed.

3.3 Preventive Measures

When food and water-borne diseases occur, it reflects a failure to lower the risks in the food production pathway. Thus, the achievement of program goal lies in the implementation of preventive measures. However, most of the preventive measures are the under the mandate of other government agencies. Strict application of these standards lies in the local government unit. However, the Regional Office Environmental and Occupational Health Unit provides the technical guidance and capacitation to local government units for proper implementation of the guidelines

Thus, a strong multi-sectoral collaboration of the FWBD PCP is a key in achieving the goal and objectives of the program.

3.3.1 Personal Hygiene

Strong promotional and advocacy campaign for personal hygiene and proper handwashing should be done in the community, health care facility, schools, day care centers, offices and food establishments including resettlements/evacuation sites during health emergencies. Providing logistical support (clean water for handwashing, availability of soap and clean communal toilet facilities) for effective implementation create a supportive environment that encourages and sustains a change in behavior.

3.3.2 Safe, clean water

Administrative Order No. 2017-0010 provides the **Philippine Standards for Drinking Water**. It defines drinking water as water intended for direct human consumption or for use in food preparation and related processes. According to the manual, drinking water must be clear and does not have objectionable taste, odor and color. It should be free from all harmful organisms, chemical substances and radionuclides in amounts that could be hazardous to humans. To ensure the safety of drinking water, the manual provides guidelines on the following:

- a. Water sampling and examination of all types of water sources that includes the frequency sampling for physical, chemical, microbiological examination.
- b. Drinking water from refilling stations, vending machines, mobile tanks and bulk water supply for the required initial and periodic examinations for microbiological, physical, chemical and radiological quality.
- c. Standard values of mandatory parameters that will be considered safe for human consumption.
- d. Evaluation and interpretation of results
- e. Emergency drinking water parameters

3.3.3 Proper Food Handling

Simple boiling of water for 3-5 minutes may remove physical and microbiological impurities.

Chapter III of the **Sanitation Code of the Philippines (PD 856)** provides the full details on the rules and regulation for food establishments to ensure food are safe from contamination. Presently, the local government unit has the responsibility to implement these rules and regulations. **Regional (Environmental Health Staff)** and **Provincial staff (Sanitary Engineer and Inspector)** should monitor the implementation of these rules and regulation. Food establishments include eating and drinking places where food and drinks are processed, manufactured, served or stored. These can be classified as follows:

- a. Food Eating and Drinking Establishments
- b. Food Processing
- c. Food Retailing
- d. Street Food Trade
- e. Market and Slaughterhouse

Some of the regulations from **Chapter III of PD 856** are as follows:

- a. No food establishment operates for public patronage without a Sanitary Permit. The permit is renewable yearly and should be posted in a conspicuous area.
- b. No person shall be employed in any food establishment without a health certificate issued by the city/municipal health officer. This certificate shall be issued only after the required physical and mental examinations and immunizations.
- c. Requirements for food handlers:
 - ✚ Wearing of hair nets (restrain) and clean working garments;
 - ✚ Proper hand washing before handling any food (raw ingredients and cooked), after visiting the toilet, coughing or sneezing and after smoking;
- d. No person shall be allowed to work as food handlers and be engaged in food preparation while afflicted with a communicable disease.

The following healthy practices should be observed and followed at home or in any food business:

1. Food preparation:
 - ✚ Only safe and wholesome food materials are used.
 - ✚ Food materials are cleaned with safe water.
 - ✚ Enough equipment and utensils are provided, properly cleaned and sanitized.
 - ✚ Food and food materials are prepared, processed and cooked in a sanitary manner.
2. Food storage
 - ✚ Wet and dry foods are stored separately.
 - ✚ Proper temperature is maintained.
 - ✚ Food and food materials are protected from contamination by insects and rodents, chemical substances and others.

3. Food serving

- ✚ Food and food materials are properly displayed and protected from all possible contamination.
- ✚ Food are served with clean and sanitized utensils.
- ✚ Maintenance of proper temperature
- ✚ Separate utensils are used for each kind of food.
- ✚ Left-over foods are never used.
- ✚ All contaminated foods of those of doubtful quality are condemned.


3.3.4 Vaccination

- ✚ Killed oral cholera vaccine may be given to children and adults living in endemic areas to prevent outbreaks caused by cholera;
However, cholera vaccine is not meant to replace the provision for clean water and sanitation and hygiene (WASH), which are the core strategy for prevention of cholera.
- ✚ Rotavirus is an important cause of diarrheal disease particularly in children under 5 years. Rotavirus vaccines are effective in preventing rotavirus diarrhea and immunization of infants with rotavirus vaccine is recommended.

Annex F provides the guidelines on rotavirus and cholera vaccine

3.3.5 Health Promotion activities

Health promotional and education materials (posters, leaflets and flip charts) shall be developed by the program (FWBD-PCP) at the national level. Prototype e-copy will be distributed to the regional health office for additional reproduction if needed. Regional, provincial and hospital health promotion officers are encouraged to develop their health promotion and communication plan. A more detailed discussion on these can be found in Section VI.



Section IV: Laboratory Management

This section discusses the:

- Clinical laboratory role, its structure and services;
 - Specimen Collection, Handling and storage;
 - Specimen Packaging and Transport;
 - Referral of Specimen
- Food laboratory role and agencies providing the services.

RITM as the National Reference Laboratory provides the policy and guidelines for clinical laboratory services. Currently RITM is revising its MOP. **Any changes in policies in the revised MOP (RITM) will take precedence over what is stated in this section.** The FWBD-PCP will provide the necessary addendum.

4.0 Laboratory Management

Laboratory services for FWBD-PCP involves clinical and food laboratories within the different government agencies. Policies and guidelines are developed by specific agencies and disseminated through the Technical Working Group especially those related to the food and water-borne diseases.

What is the role of the FWBD-PCP in clinical laboratory services?

At the national level, the FWBD-PCP facilitates coordination with other agencies as needed in the implementation of its work plan, dissemination of updates and logistical support during outbreaks. The Regional FWBD Coordinator can facilitate and coordinate the needs of specific laboratory services for enhancement and upgrading.

4.1 Clinical Laboratory

Laboratory confirmation of the pathogen is an important component of the FWBD-PCP. Specimens from humans are processed in clinical laboratory. Confirmation of the specific pathogen is important in cases of food and water-borne diseases outbreak. This has implication in treatment and possible public health measures in the prevention and control of outbreak.

4.1.1 Role of clinical laboratory

In general, the role of the clinical laboratory in food-borne diseases are the following:

- 1) Ensure that appropriate clinical specimens are collected, labelled, stored and transported;
- 2) Perform appropriate tests and laboratory investigations of clinical samples;
- 3) Advise on further clinical tests and sampling;
- 4) Work with other members of the investigation team to identify and characterize the pathogen if there is clustering of cases particularly during outbreaks;
- 5) Coordinate with a National Reference Laboratory or Regional Hospital Laboratories for further testing or pathogen identification.

4.1.2 Structure

In the Philippines, clinical laboratories vary in their capacity to perform confirmatory tests for specific pathogen in a food and water-borne disease outbreak. The Research Institute of Tropical Medicine is the **National Reference Laboratory** in the Philippines. **Administrative Order No. 2015-0050** also designate RITM as the National Reference Laboratory for Rotavirus and other enteric viruses. The institution sets the policies and guidelines for all laboratories involved in processing samples for infectious diseases including food and water-borne diseases (limited to bacteria, virus and food-borne helminths). There are different levels of clinical laboratories in the country and have different capability level (Table 9).

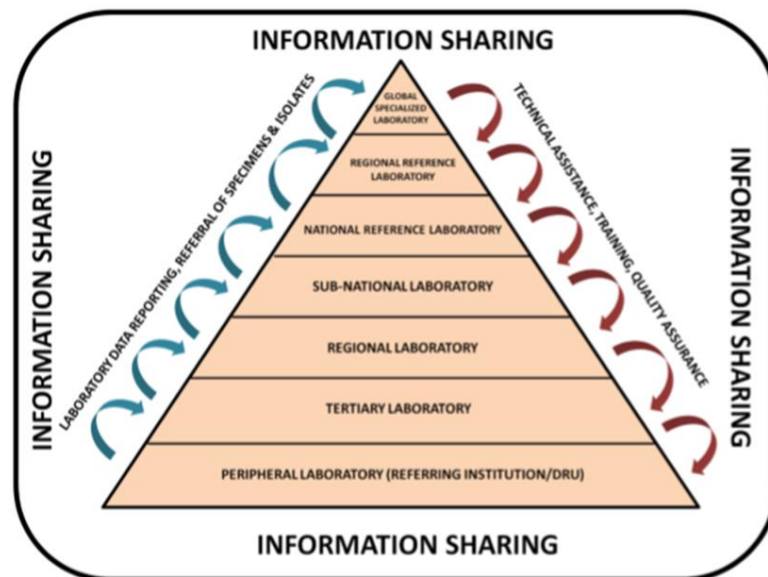
Table 9: Type of Laboratories According to Service Capability
RITM, 2013

Peripheral Laboratory
Qualified Tertiary Laboratory: is a tertiary laboratory whose qualification for aerobic bacterial culture and identification for outbreak specimens has been have been assessed by NEQAS for Bacteriology.
Qualified Regional Laboratory: is a regional laboratory whose qualification for aerobic bacterial culture and identification for outbreak specimens has been have been assessed by NEQAS for Bacteriology.
Qualified Sub-national Laboratory: will be considered qualified if it meets the minimum requirements in the annual proficiency test and if it passes other quality assurance checks by the National Reference Laboratory.
National Reference Laboratory: performs specialized diagnostic tests; provides confirmatory tests to tertiary, regional and sub-national laboratories; provides referring laboratories transport media and guidelines on the use of such media; and banks positive outbreaks nationwide
International Collaborating Centers and Referral Laboratories/ Regional Reference or Global Specialized Laboratories: refers to laboratories that receive and test specimens from WHO region which are part of the international laboratory network.

Source: *Guidelines For Specimen Collection, Transport and Referral For Infectious Diseases Outbreak Response; Manual For Clinical Specimen, RITM 2013*

In order to maximize the efficient use of these existing laboratories during disease outbreaks, the NRL defined their relationship in a Laboratory Referral System. From the lower level (example: peripheral laboratory), specimen and isolates are referred to the next level (a qualified tertiary laboratory or qualified regional laboratory) who had the capacity to perform the required confirmatory test. The higher-level-laboratories (reference laboratories) provide technical guidance, capacity building and quality assurance checking to the peripheral laboratories. There is sharing of data and expertise at each level (Figure 8). Each level has its own roles and responsibilities. A summary of these roles and responsibilities in each level is Annex G.

Figure 8: Laboratories Level of Service Capability and their Technical Relationships(in terms of referral of specimen, sharing of information, capacity and expertise)
RITM, 2013



Source: Guidelines for Specimen Collection, Transport and Referral For Infectious Diseases Outbreak Response; Manual For Clinical Specimen, RITM 2013

During FWBD outbreaks and other conditions of international concern when there is a need to urgently confirm the diagnosis and to save the quality of the specimen, clinical specimens from the LGU are transported directly to the National Reference Laboratory.

4.1.3 Services

4.1.3.1 Specimen Collection, Handling and Storage

Based on the clinical symptoms and data gathered, the initial impression will determine the possible etiologic agent and the kind of specimen to be collected. Table 10 provides a summary guide for specimen collection for specific illness that are currently under surveillance. There are general guidelines on specimen collection to ensure the integrity of the specimen (Annex H).

As stated in the scope of the program, the FWBD-PCP is currently focusing on microorganisms (bacteria, viruses, protozoans and food-borne helminths). Currently surveillance data is limited to bloody diarrhea, Cholera, Hepatitis A, Typhoid Fever and Rotavirus. And foodborne helminths data are limited to reports from endemic areas wherein assessment and mapping/geotagging have been done. **This Manual of Procedure will be updated when the program coverage expands to include other pathogens.**

During outbreaks, the Philippine Integrated Disease and Response (PIDSR) MOP states that the Regional Epidemiology Unit shall identify and coordinate with the laboratories within the region. It is important to identify and contact the laboratory with appropriate capabilities at the onset of the investigation to obtain instructions on the type of specimen, proper specimen collection, handling, storage and transport of specimen including the special media and other logistics.

Table 10: Summary Guide For Specimen Collection
RITM, 2013

Disease	Etiologic Agent	Tests	Appropriate Specimen	Time of Collection	Quantity	Container/ Transport Medium	Storage Condition Prior to Transport	Transport/ Time conditions	Is the test Confirmatory/ Rapid/ Presumptive Test	Turn-around Time	Testing Centers
Acute Bloody Diarrhea	<i>Shigella</i> spp. <i>Salmonella</i> spp.	Culture	Fresh stool	As soon as possible after onset of illness preferably during active diarrhea	2-5 ml liquid or 5 grams solid (pea size)	Clean, dry, wide mouthed, leak-proof container	Cary Blair at room temperature or 4 degrees Celsius up to 24 hours	Cold Pac/k within 3-6 hours (within 24 hours)	Confirmatory	3-5 days	RITM or any qualified tertiary laboratory
			Rectal swab		1-2 swabs	Cary Blair Transport Medium in screw-capped tube	Room temperature up to 24 hours	Room temperature within 24 hours			
		Sero-grouping/ Sero-typing	Pure isolate			Nutrient Agar butt/ slant in disposable plastic leak-proof tube	Refrigerated temperature	Cold pack as soon as possible	Confirmatory	1-2 hours except for <i>Salmonella</i> H-typing (minimum of 5 days)	

Disease	Etiologic Agent	Tests	Appropriate Specimen	Time of Collection	Quantity	Container/ Transport Medium	Storage Condition Prior to Transport	Transport/ Time conditions	Is the test Confirmatory/ Rapid/ Presumptive Test	Turn-around Time	Testing Centers
Cholera	<i>Cholera vibrio</i>	Culture	Fresh stool	As soon as possible after onset of illness preferably during active diarrhea	2-5 ml liquid or 5 grams solid (pea size)	Clean, dry, wide mouthed, leak-proof container or Cary Blair	Cary Blair at room temperature or 4 degrees Celsius up to 24 hours	Cold Pac/k within 3-6 hours (within 24 hours)	Confirmatory	3-5 days	RITM or any qualified tertiary laboratory/ regional/ reference laboratory
			Rectal swab		1-2 swabs	Cary Blair Transport Medium in screw-capped tube		Room temperature within 24 hours			
		Sero-grouping/ Sero-typing	Pure isolate			Nutrient Agar butt/ slant in disposable plastic leak-proof tube	Refrigerated temperature	Cold pack as soon as possible	Confirmatory	1-2 hours	

Disease	Etiologic Agent	Tests	Appropriate Specimen	Time of Collection	Quantity	Container/ Transport Medium	Storage Condition Prior to Transport	Transport/ Time conditions	Is the test Confirmatory/ Rapid/ Presumptive Test	Turn-around Time	Testing Centers
Typhoid	<i>Salmonella typhi</i>	Culture	Fresh stool	2 nd to 3 rd week after onset of illness	5 grams solid (pea size)	Clean, dry, wide mouthed, leak-proof container or Cary Blair		Room temperature within 1-2 hours	Confirmatory	Minimum of 5 days	RITM or any qualified tertiary laboratory
	<i>Salmonella Paratyphi A</i>							Cold packs/ Room temperature (within 24 hours) within 3-6 hours			
	<i>Salmonella</i> spp.						In a holding medium at room temperature or 4 degrees Celsius for up to 24 hours	Room temperature or 4 degrees Celsius/ within 24 hours			

Disease	Etiologic Agent	Tests	Appropriate Specimen	Time of Collection	Quantity	Container/ Transport Medium	Storage Condition Prior to Transport	Transport/ Time conditions	Is the test Confirmatory/ Rapid/ Presumptive Test	Turn-around Time	Testing Centers
Typhoid	<i>Salmonella typhi</i>	Culture	Rectal swab	2 nd to 3 rd week after onset of illness	2 swabs	Cary Blair Transport Medium in screw capped tube	Room temperature up to 24 hours	Room temperature or 4 degrees Centigrade/within a week	Confirmatory	3-5 days	RITM or any qualified tertiary laboratory
	<i>Salmonella Paratyphi A</i>		Blood	1 st week after onset of illness	Adult: 1:5 to 1:10 ratio with BCB Infant/Child: 1:10 to 1:20 ratio with BCB	Blood Culture Broth	Incubate at 35-37 Degrees Celsius or store at room temperature until ready for transport	Room temperature/ within 3 after collection		7 days	
	<i>Salmonella</i> spp.	Sero-grouping/ Sero-typing	Pure isolate			Nutrient Agar butt/ slant in disposable plastic leak-proof tube	Refrigerated temperature	Room temperature as soon as possible	Confirmatory	Minimum 5 days	

Disease	Etiologic Agent	Tests	Appropriate Specimen	Time of Collection	Quantity	Container/ Transport Medium	Storage Condition Prior to Transport	Transport/ Time conditions	Is the test Confirmatory/ Rapid/ Presumptive Test	Turn-around Time	Testing Centers
Acute Watery Diarrhea	<i>Rotavirus</i>	ELISA	Stool	Upon first contact with the patient	5-10 ml	Sterile leak-proof screw capped type container	Refrigerated prior to transport	In ice within 72 hours	Presumptive	5-7 days	RITM
Hepatitis	<i>Hepatitis A</i>	HAV IgM	Serum 1 sample only	Onset of illness	At least 1-2 ml	Screw capped cryotube	4 degrees Centigrade Celsius	In ice	Presumptive	24 hours	

Source: Guidelines For Specimen Collection, Transport and Referral For Infectious Diseases Outbreak Response; Manual For Clinical Specimen, RITM 2013

4.1.3.2 Specimen Packaging and Transport

International Laws and National Guidelines

The National Guidelines is based on the international regulations for the transport of infectious substance by any mode of transport which is based upon the Recommendations made by a Committee of Experts on Transport of Dangerous Goods (UNCETDG), a committee of United Nations Economic and Social Council. Annex I provides some of International Laws governing the transport of dangerous goods.

Classification of Infectious Substance

1. Infectious Substance Category A

Category A is an infectious substance which is transported in a form that, when exposure to it occurs, can cause permanent disability, life threatening or fatal disease in otherwise healthy humans or animals (WHO 2017). A listing of Infectious Category A substance is in Annex J. New and emerging pathogens which are not included in list but meets the same criteria shall be assigned to Category A. And in doubt if a substance meets the criteria, it will be listed as Category A. Infectious substance Category A will be assigned with UN number and Proper shipping names according to their hazard classification and their composition. Proper Shipping Names are used to clearly identify the dangerous article or substance. UN number and Proper Shipping Names for Category A Infectious Substance is shown in Annex K.

2. Infectious Substance Category B Category

B is an infectious substance which does not meet the criteria for inclusion in Category A. Category B assigned UN number shall be UN 3373 with the Proper Shipping Name *BIOLOGICAL SUBSTANCE, CATEGORY B*,

Clinical laboratories are at various level of service capability; hence clinical specimens are being transported from the local government unit (Municipality/ city/ province) to regional or reference laboratory. Currently, postal or airline industry act as courier of the clinical specimen. Thus, there are regulatory requirements in packaging and shipping conditions to preserve the integrity of the specimen and prompt arrival to the testing laboratory. The National Reference Laboratory – RITM developed the guidelines for packaging and transporting these clinical specimens with the following objectives:

- ✚ Ensure that specimens are packaged and transported using safe and standardized techniques and methods;
- ✚ Prevent the loss of vital laboratory information due to deterioration or loss of specimen (improper packaging, poor transport arrangement)
- ✚ Ensure safety of health workers during packaging and transporting of specimens;
- ✚ Ensure timely arrival of the specimen to testing laboratory

The FWBD-PCP will collaborate with RITM and EB to define the arrangement of transporting specimen including budgetary concerns of the LGU (routine testing and outbreak investigation).

Triple Packaging System

The RITM Manual of Clinical Specimen provides the following triple packaging requirements for biological substance sent to their laboratory:

- a) **Primary receptacle (cryovial):** is secured with paraffin. It is individually wrapped with absorbent material like paper towel and separated to prevent contact in case of multiple primary receptacles. The cryovial is placed inside an airtight, leak-proof plastic zip lock. The receptacle is packaged with enough absorbent material to absorb all fluid in case of breakage or leakage.
- b) **Secondary receptacle:** The second receptacle (a plastic container bottle, is durable, watertight and leak-proof.
- c) **Outer packaging:** is a sturdy box which is labeled with all the necessary signs and markings. The list of packaged content is encased in a plastic zip lock and placed in between the secondary receptacle and the outer container.



Markings

Clinical specimen packages are marked to provide information about the contents of the package, the nature of the hazard, and the packaging standards applied. All marks on the package shall be placed in a way that it is clearly visible and not covered by other labels or mark. Each package shall display the following information on the outer packaging:

- ✚ The shipper's name and address;
- ✚ The name and contact number of a responsible person, knowledgeable about the shipment;
- ✚ The receiver's name and address; the UN number and followed by the Proper shipping name (UN 2814 "INFECTIOUS SUBSTANCE AFFECTING HUMAN");

Note: Temperature storage requirement is optional. When dry ice or liquid nitrogen is used – the name of the refrigerant, the appropriate UN number and the net quantity should be indicated.

Labelling


There are two types of label: a) Hazard label: in the form of a square set at angle of 45 degrees (diamond shape) are required for most dangerous goods in all classes; b) handling labels: in various shapes are required either alone or in addition to hazard labels. Annex L provides an illustration of these labels.

4.1.3.3 Reporting of Results

Prompt release of laboratory result is crucial in confirming the diagnosis, pathogen involved and in an outbreak situation - the public health measures to be implemented to control the outbreak and prevent recurrence of the outbreak.

General Guidelines

- 1) The testing laboratory prepares the following documents using the standard forms (Annex M):
 - ✚ Line list of official laboratory results for outbreak/ special pathogen which is released to EB, CHD and concerned RESU only;
 - ✚ Individualized Official Laboratory Result;

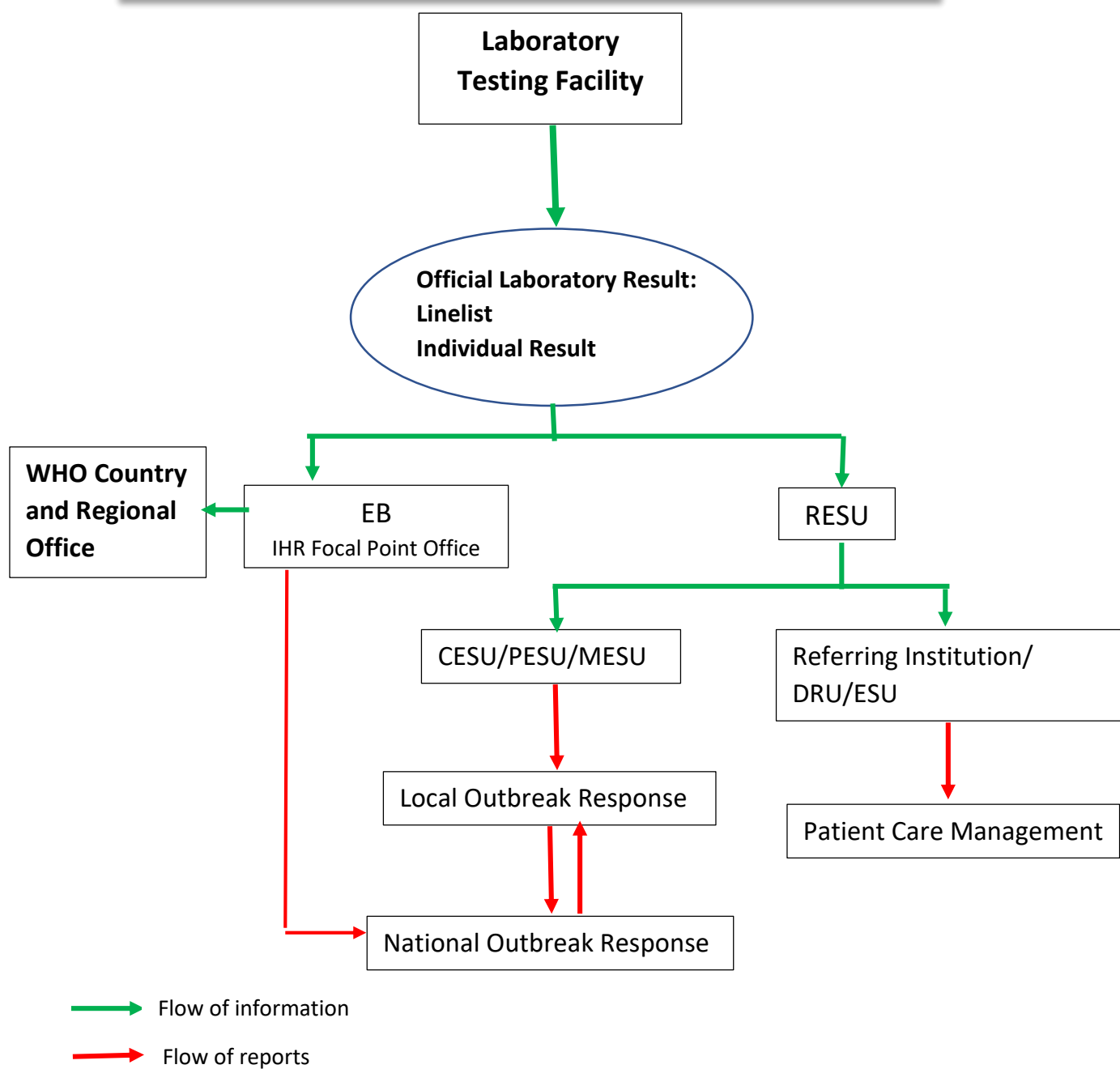
 Cover letter to CHD Regional Director through the RESU Head copy furnished EB

- 2) Official Laboratory result may only be released to authorized personnel. It may also be sent electronically through authorized fax number and official e-mail address. **Official Laboratory Result may not be released over the phone or through SMS text messages.** In releasing the result, the testing laboratory staff shall document the time and date, the mode of transmittal and to whom it was released.
- 3) EB shall provide the DOH-Central, DOH Infectious Disease Office, WHO Philippine Country Office, and other relevant stakeholders with a summary of the surveillance/outbreak reports for appropriate actions at the national level. RESU is responsible in providing the concerned PESU/CESU/MESU or the referring institution with the results for appropriate action at their level.
- 4) The flow of laboratory information (results of the diagnostic testing) from the testing laboratory to the referring institution is in Figure 8.

Note: The FWBD Regional Coordinator, as member of the EICT in an outbreak investigation, may provide the following assistance to the team:

- a) Ensure requirements for referral of specimens (proper specimen collection, documentation and communication) have been accomplished according to the guideline;
- b) Communicate with the FWBD Program Manager any issues/problems encountered during transportation of specimens in order to facilitate the resolution of such problems;
- c) Assist in following-up in the release of results of the diagnostic confirmation tests done

Figure 8: Flow of Laboratory Information from the Testing Laboratory to the Referring Institution



Source: *Guidelines for Specimen Collection, Transport and Referral For Infectious Disease Outbreak Response. Manual for Clinical Specimens, RITM 2013*

4.1.3.3 Interpreting of Results

A quick guide in interpreting the laboratory result is given in Table 11.

Table 11. Guide in the Interpretation of Laboratory Result

Clinical Impression	Etiologic Agent	Test Performed	Result	Interpretation	Remark
Acute Diarrhea (with or without blood)	<i>Salmonella</i> spp.	Culture and Serology	Positive for <i>Salmonella</i> spp.	<i>Salmonella</i> spp., isolated by culture and sero typed by serology	A sensitivity result is included according to the latest CLSI
	<i>Shigella</i> spp.		Positive for <i>Shigella</i> spp.	<i>Shigella</i> spp., isolated by culture and confirmed by serology	
			No important enteropathogen isolated	Negative for Shigella	
Cholera	<i>Vibrio cholera</i> O1	Culture and serology	Positive for <i>Vibrio cholera</i> O1 Ogawa El Tor Classical	<i>Vibrio cholera</i> O1-Ogawa El Tor isolated by culture and confirmed by serology	A sensitivity result is included according to the latest CLSI
			Positive for <i>Vibrio cholera</i> O1 Inaba El Tor Classical	<i>Vibrio cholera</i> O1-Inaba El Tor isolated by culture and confirmed by serology	

Clinical Impression	Etiologic Agent	Test Performed	Result	Interpretation	Remark
Cholera	<i>Vibrio Cholera O1</i>	Culture and serology	Positive for <i>Vibrio cholera O1</i> Hikojima El Tor Classical	<i>Vibrio cholera O1</i> - Hikojima El Tor isolated by culture and confirmed by serology	A sensitivity result is included according to the latest CLSI
	Other <i>Vibrio</i> spp.		Positive for <i>Vibrio cholera non-O1</i>	<i>Vibrio cholera non-O1</i> isolated by culture and confirmed by serology	
			Positive for <i>Vibrio</i> spp.	<i>Vibrio</i> spp., isolated by culture and confirmed by serology	
			No important enteropathogen isolated	Negative for <i>Vibrio cholera O1</i> , and 0139, <i>Vibrio cholera nonO1</i> , <i>Vibrio</i> spp. <i>Vibrio parahaemolyticus</i>	

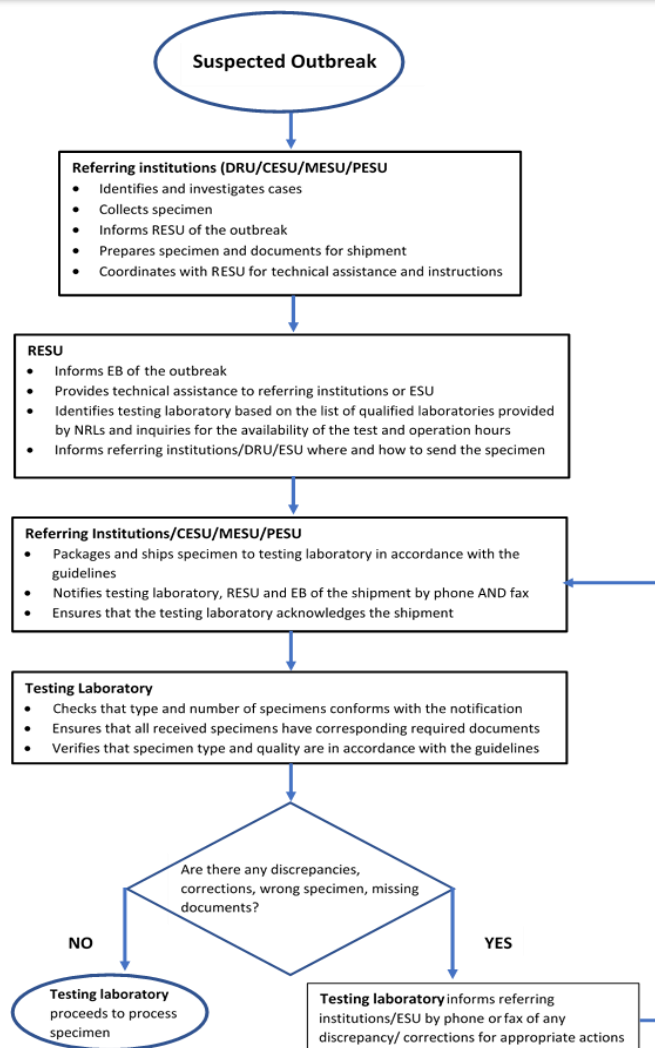
Clinical Impression	Etiologic Agent	Test Performed	Result	Interpretation	Remark
Typhoid/Paratyphoid Fever/Non Typhoidal Fever	<i>Salmonella Typhi</i> , <i>S. paratyphi</i> , and other <i>Salmonella</i> spp.	Culture and serology	Positive for <i>Salmonella</i>	<i>Salmonella</i> isolated by culture and confirmed by serology	A sensitivity result is included according to the latest CLSI
			No important enteropathogen isolated	Negative for <i>Salmonella</i> spp.,	
Rotavirus	<i>Rotavirus</i>	ELISA Antigen detection	Positive	Positive for Rotavirus antigen	
			Negative	Negative for Rotavirus antigen	
Hepatitis	<i>Hepatitis A</i>		Reactive	Positive for Hepatitis A	
			Non-reactive	Negative for Hepatitis A	

Source: Guidelines For Specimen Collection, Transport and Referral For Infectious Diseases Outbreak Response; Manual For Clinical Specimen, RITM 2013

4.1.3 Referral Flow During Outbreaks

In a disease outbreak investigation, microbiological testing of clinical samples is important in isolating and identifying the causal agent. A functional referral system for specimen starts with the facility/point where the specimens are collected, handled, packed, documented and until it is transported to the appropriate laboratory for testing. A good referral system ensures that the integrity of the specimens is maintained until it is properly processed and prevents loss of specimens. The referral flow is illustrated in Figure 9.

Figure 9: Flow of Laboratory Referral From Collection to Receipt at Testing Laboratory



Source: Guidelines For Specimen Collection, Transport and Referral For Infectious Diseases Outbreak Response; Manual For Clinical Specimen, RITM 2013

Note: RITM Manual is currently being revised. The above flow chart may change accordingly.

4.1.3.1 Requirements for Referral

RITM “Manual for Clinical Specimen”, set the following requirements for specimen referral. The three categories of requirements should be complied by the referring facility.

Category 1: Specimen Requirement

This category refers to requirements in specimen collection wherein efforts are exerted to maintain the integrity of the specimen.

Box 2: Requirements for Proper Specimen Collection

Specimen Type and date of collection	The specimen should be representative of the infectious process e.g. cholera: rectal swab) and also suitable for the test method to be used. It is important to collect type at the appropriate phase of the disease.
Specimen Collection Safety	<ul style="list-style-type: none">✚ Strict aseptic technique should be practiced throughout the procedure of collection;✚ Hands must be washed before and after collection;✚ Appropriate PPE must be worn during collection;✚ Appropriate decontamination and disposal of potentially infectious wastes and materials;
Specimen Quality	<ul style="list-style-type: none">✚ Ideally the specimen should be freshly and aseptically collected;✚ Should be collected before administration of antimicrobial therapy;✚ The specimen should be in an appropriate transport media;
Specimen Quantity	Of optimal amount as specified per target organism
Specimen Container	<ul style="list-style-type: none">✚ Specimen container must be clean, sterile and leak-proof;✚ The outside of the specimen container should be cleaned and decontaminated prior to packing;
Specimen Storage	<ul style="list-style-type: none">✚ The temperature inside the specimen container depends on the type of test that will be performed and the sensitivity of the organism to extreme of temperature;✚ If the type of test requires a viable organism in the specimen, then the temperature during storage should be ideal for the growth of the organism;✚ Appropriate transport media should be used if a viable organism is required by the test procedure

Box 3: Requirements for Proper Specimen Packing

Specimen Label	<p>The specimen should be properly labeled with the following information</p> <ul style="list-style-type: none"> a) Specimen ID/Patient's name; b) Age/Sex; c) Specimen Type; d) Date and time of collection:
Packaging	<ul style="list-style-type: none"> ✚ The specimen should have three components for packaging of specimen: primary receptacle, secondary receptacle and rigid outer packaging; ✚ Parcels should be properly labeled with: <ul style="list-style-type: none"> a) Correct sender's address; b) Correct receiver's address c) Emergency contact information (name and contact numbers); d) Biosafety label's (i.e. biosafety stickers, IATA specified labels such as "Biological Substance, Category B"; e) Orientation arrows placed on two opposite sides of package; f) Net weight or volume of sample if multiple packages are being sent

The tables were taken from the Guidelines for Specimen Collection, Transport and Referral For Infectious Disease Outbreak Response. Manual for Clinical Specimens, RITM 2013



The above picture is taken from the Guidance on Regulations for the Transport of Infectious Substance 2017-2018. Geneva Switzerland, WHO;2017 License: CC-BY-NC-SA 3.0 IGO

Category 2: Document Requirement

All clinical specimens should come with the corresponding documents to provide identification and minimize specimen loss. Box 3 provides the proper required documents for specimen during outbreak investigation.

Box 4: Requirements for Proper Specimen Documentation

Laboratory Referral Form for Outbreak Testing (Annex N)	<ul style="list-style-type: none">✚ Formalizes the referral of samples for testing;✚ Documents contact information of sending/referring institution;✚ Clearly states the requested test and reason for referral;✚ Line list format for multiple samples;✚ Documents shipment details;
Copies of CRF/CIF	<ul style="list-style-type: none">✚ Provides additional clinical and demographic details to the testing facility✚ Copies of Case Report Form / Case Investigation Form as appropriate for each sample (See module on Surveillance and Outbreak Response)

The tables and picture were taken from the Guidelines for Specimen Collection, Transport and Referral For Infectious Disease Outbreak Response. Manual for Clinical Specimens, RITM 2013

Reminder:

1. Use ball point/fine black or blue pens ONLY
2. Use block and legible letters
3. Review data on the form before submission
4. Accompanying documents should be placed in resealable plastic bags (ziplock) separate from the shipped specimens



Category 3: Communication/Coordination Requirement

It is important at the onset of the outbreak investigation for the Epidemic Investigation and Control Team (EICT) to communicate with the identified laboratory of the outbreak and check if they can accommodate the impending shipment of specimen. Communicating with the laboratory also provides an opportunity for the sending institution to clarify specimen collection, handling, storage, and shipment requirements with the testing laboratory. And provides documentation that the specimens have been received intact by the testing laboratory and arrived promptly. Communication may come in the form of verbal (by phone conversation) or written through email or SMS messaging. It is important in both form that the date, time and recipient had been logged for documentation

Box 5: Communication/Coordination Requirements









Notification of RESU	Advise the RESU of intent to refer specimen and the shipment details using a transmittal document (simultaneous information to RITM and RESU before sending of specimens)
Notification of Testing Laboratory of Shipment	Inform the testing laboratory of patient and sample details through the required accompanying documents for referred specimens
Acknowledgement of Receipt of Samples by Testing Laboratory	Ensure that the testing laboratory acknowledges the receipt of the parcel
Acknowledgement of Receipt of Results by Referring Institution	Ensure results are received on the expected date of release of results, which would be based on the turn-around time of the requested test

Source: Guidelines for Specimen Collection, Transport and Referral For Infectious Disease Outbreak Response. Manual for Clinical Specimens, RITM 2013

4.1.3.2 Criteria for Rejection of an Outbreak Specimen













Criterion 1: Non-Compliance to Specimen Requirements (Specimen Quality)

Listed below are some conditions referring to specimen quality that may lead to rejection of outbreak specimen:

-  Inappropriate specimen type for the requested test;
-  Insufficient quantity;
-  Leaking/broken container
-  Suspicion of contamination or tampering
-  Inappropriate transport or storage;
-  Unknown time delay;
-  Sample deterioration (e.g., hemolysis for serologic samples; bacterial overgrowth or contamination)
-  Unlabeled or illegibly labeled specimen

Depending on the reasons for rejection, the testing laboratory may decide to recourse on actions in Table 12.

Table 12: Possible Actions to be Taken According to Cause of Specimen Rejection

Inappropriate specimen type for the requested test	 Testing may still be possible;  A disclaimer shall be placed in the results that the sample is not the appropriate specimen type;  Recollection of appropriate sample shall be advised
Insufficient quantity Leaking/broken container	 Testing is not possible;  Recollection of appropriate sample shall be advised
Suspicion of contamination or tampering;	 Testing may be possible;  Appropriate investigation by the sender shall be advised;  Recollection shall be advised;
Inappropriate Transport or storage Unknown Time Delay Sample deterioration	 Testing may be possible;  A disclaimer shall be placed in the results regarding the condition of the sample
Unlabeled or illegibly labeled specimen	 Testing may be possible;  Validation and verification of sample identity shall be done by the receiving laboratory to resolve the issue

Source: *Guidelines for Specimen Collection, Transport and Referral For Infectious Disease Outbreak Response. Manual for Clinical Specimens, RITM 2013*

Criterion 2: Non-Compliance with Documents Requirements

This happens when the submitted documents are incomplete or the information in the document are incomplete. If this happens, the staff of the testing laboratory shall withhold the release of the results until the missing information is completed or clarified by the referring institution. The laboratory staff shall also communicate to the referring institution that it may lead to delays in the results due to incomplete specimen information.

Criterion 3: Non-Compliance with Communication/ Coordination Requirements

Situations that show a failure in communication/coordination are:

- a) The testing laboratory were not informed of the shipment of the specimen;
- b) There is no documented acknowledgement of acceptance of specimen for testing by the testing laboratory

In such a situation the testing laboratory staff shall inform referring institution of the possible delay in the results or non-performance of the test requested. Such actions will be noted in the official results form.

Whatever the reasons for rejecting the specimen, the laboratory staff shall inform the referring institution of the rejection of the specimen **within 24 hours upon receipt of the samples**. The notification must be in written form. If verbal notification was given, proper documentation should be observed (logbook or report).

4.2 Food Laboratory

The food laboratory in food-borne disease outbreak provides:

- ✚ Advice on appropriate samples to be taken from food;
- ✚ Performs appropriate laboratory investigation of the food to identify the suspect pathogen;
- ✚ Provides advice on further sampling when a specific agent is found in the food which also can guide in the collection of specimens among the food handlers;
- ✚ Working with clinical laboratory to arrange for typing or additional characterization of the organisms (serotyping, molecular subtyping) as appropriate;
- ✚ Supports epidemiologic and environmental investigations in detecting pathogen in the implicated food and understanding how the outbreak occurred

Food laboratories also conducts routine collection and testing to prevent the occurrence of outbreak. The following agencies provide such services to ensure safety of the consuming public.

4.2.1 Food and Drug Administration

The laboratories at the FDA conduct tests necessary for determining compliance with product safety and quality standards. Its microbiology laboratory processed food samples for microbial contamination. It also monitors the safety of pre-packaged foods in the market and provides advisory to prevent consumption of contaminated food. Any positive findings should be reported to EB for further investigation.

4.2.2 Bureau of Quarantine

The agency ensures food safety in all entry points (ports, airports). Among its function that relates to food safety:

- 1) Ensure sanitation and food safety requirements of domestic and inter-island and food service establishment within premises of ports, airports, and in flight through sampling and examination of food specimen;
- 2) Regulation on exportation of food products

If the BQ food laboratory analysis reveals findings of contamination, a confirmatory test is done by RITM.

4.2.3 National Meat Inspection Service

NMIS performs microbiological tests on suspected fresh, chilled, frozen, local and imported meat and meat products as food vehicles for FWBD. Any positive findings should be reported to EB.

4.2.4 Bureau of Fisheries and Aquatic Resources

BFAR Central Office Product Testing Laboratory and Regional Fish Quality Control Laboratories conduct testing of fish and other aquaculture products for any bacterial contamination.

Section V: Surveillance and Outbreak Response

This section discusses the:

- Surveillance
- Outbreak Response
 - Detecting the Outbreak
 - Outbreak Investigation.

EB is currently revising its MOP for PIDSR. Reporting forms and processes may change after the approval and dissemination of this MOP. **The revised guidelines from EB will take precedence over those currently included in this MOP.**

5.0 Surveillance and Outbreak Response

5.1 Surveillance of Human Cases

5.1.1. Definition

Surveillance is a core public health function. It is the continuous and systematic collection, analysis, and interpretation of health-related data needed for planning, implementation and evaluation of public health practices.

5.1.2. Importance of surveillance in food and waterborne diseases

- ✚ Food and water-borne diseases can be prevented and controlled by identifying the hazards and risk areas in the food and water production pathway and instituting safety measures. Surveillance data reflects whether the program strategies bring the desired reduction in morbidity and mortality.
- ✚ Food is exported from one country to another thus, food and water-borne diseases can spread across country. Thus, it is important that monitoring of entry and exit point for food and food products should be established and maintained.
- ✚ The International Health Regulation requires countries to notify the World Health Organization of public health events that may be of international concern. Food-borne disease is listed as one of the international public health threats in the 21st century (IHR 2005);
- ✚ The prevention and control of food and water-borne diseases entail strong multi-sectoral collaboration involving surveillance and response, food and water safety measures and other government agencies;
- ✚ Early detection of food and water-borne disease outbreak and prompt control and preventive actions minimizes the impact on public health and economy.

5.1.3. Uses of surveillance and response to FWBD

1. Monitor trends of syndromes that might indicate foodborne illnesses;
2. Detect and respond to foodborne events to allow rapid implementation of control measures;
3. Establish a culture of systematically collecting information from foodborne event investigation to begin to identify high risk food items and hazards;
4. Guide to policy development and for monitoring and evaluation

5.1.4 Policies

Food and water-borne diseases should be detected and notified because under the **International Health Regulation (IHR) 2005**, these are considered international public health threats. Under the Philippine law (**Republic Act 3573**), some food and waterborne diseases are included in the list of communicable diseases that should be reported by all individuals and health facilities.

The Department of Health issued policies and guidelines (Department Circular and Administrative Order) that supported Republic Act 3573. In 2001, **Department Circular No. 176s 2001** revised the list of notifiable diseases to include other food and water-borne diseases such as Cholera, Viral Hepatitis, Typhoid Fever, Paralytic Shellfish poisoning, watery diarrhea, and acute bloody diarrhea. The reporting of food and waterborne diseases is further supported by **PhilHealth Circular No. 030s-2000** wherein all hospitals and medical practitioners are directed to report the revised list of notifiable diseases. In 2007, **Administrative Order No. 2007-0036** provides the framework for the Philippine Integrated Disease Surveillance and Response wherein specific food and water-borne diseases and events are reported and investigated. **Administrative Order No. 2018-0028** provide guidelines in developing and updating the list of notifiable diseases and health events of public health concern (NDEPH) that should be mandatorily reported to the Department of Health.

5.1.5 Structure

Disease surveillance for food and water-borne diseases is included in the existing Philippine Integrated Disease Surveillance System and Response (PIDSR). PIDSR is under the Public Health Surveillance and Informatics Division of Epidemiology Bureau.

Food-borne events can also be detected through the Event Based Surveillance (ESR). Event-based surveillance is the organized, unstructured capture of information on new events that are not included in the indicator-based surveillance; events that occur in populations which do not access health care through formal channels; rare, unusual or unexpected events. ESR describes illnesses and deaths occurring in individuals or clusters or those related to potential exposures that threaten public health. ESR is on the Applied Epidemiology Health Management Division of Epidemiology Bureau.

The program is concerned with cluster of diseases or syndromes captured by ESR wherein the symptoms occur after the intake of food and water contaminated by microorganisms (bacteria, viruses, protozoans and foodborne helminths).

Food and water-borne diseases are also reported through the PIDSR wherein aggregated data of food and water-borne diseases or syndromes are reported on a weekly basis. The diseases or syndromes are reported through structured channels and follows criteria (case definition) in order for such diseases to be counted.

Disease surveillance and response is the mandate of the Epidemiology Bureau. All policies and guidelines in relation to these functions will emanate from EB. Policies on reporting flow and forms mentioned in this manual serves only to reiterate the existing system for the reader. The FWBD-PCP, as end users of the data, collaborates with EB for events and diseases caused by the intake of contaminated food and water.

5.1.6. Detection, Reporting, Analysis and Interpretation of FWBD data

What is the role of FWBD-PCP in surveillance activity?

The importance of surveillance to the FWBD-PCP has been clearly stated in section 5.1.3 (page 74). Thus, a reliable, timely and quality surveillance data is needed. The FWBD-PCP should **facilitate/assist** in the timely collection of PIDSR reports. **Regional FWBD coordinators can work with RESU/PESU/CESU/MESU in the collection of surveillance reports during their supervisory visits.** The flow of surveillance report as stated in the PIDSR MOP is shown in Annex O. The algorithm of the surveillance report flow is shown in this manual for the FWBD Regional coordinator be familiarize with the flow and type of reports to be collected.

5.1.6.1 Detection

Each disease under surveillance has a standard case definition to allow data consistency across all reporting units and ensure accurate tracking of a disease or syndrome. **Case definition** is a set of criteria that is used to determine if a person has a disease, syndrome or condition and if a case should be included in reporting and investigation (MOP, PIDSR). Cases are further classified into a suspect case, probable case and confirmed case. A **suspected case** is a case presenting indicative clinical picture without being a confirmed or probable case. **Probable case** is a case with clear clinical picture or linked epidemiologically with a confirmed case. A **confirmed case** is a case verified by laboratory analysis (MOP, PIDSR).

Food and water-borne diseases that are included in the national surveillance system are described in Annex P. This information can be useful for health facilities in analyzing their data and in investigating food and water-borne outbreaks in their locality.

Cases can be detected in the community, health facilities (barangay health stations, Rural health unit, city health office, hospitals, private health providers and school clinics). Cases are detected from the clinical manifestations of the patients and good history taking.

Laboratory testing is needed in confirming specific etiologic agent of a food and water-borne disease. Ideally laboratory confirmation for a food and water-borne disease should be done (depending in availability of resource) routinely. However, this is dependent on the capacity of

the laboratory in the area. Based on the clinical diagnosis, the appropriate specimen should be collected. Refer to Section 4.1.3.1 (pages 48-52) under Laboratory services, the Summary guide for specimen collection.

5.1.6.2 Reporting

Like in case detection, surveillance data reports come from the DRUs (BHS, RHUs). There are two source documents for food and water-borne diseases are the weekly notifiable disease reporting and the case report form (Annex Q):

1. **Weekly Notifiable Diseases Report Summary Page** – It serves as the summary table for the weekly reporting of notifiable diseases. It also shows the category and frequency of reporting of all the notifiable disease included in the PIDSR;
2. **Case Report form** – It is a disease specific report form that should be filled up by the DSC for diseases/syndromes under Category II)

The following section provides practical steps for health facility staff in processing their surveillance data. Surveillance data is useful if it is processed and use for decision making. The main user of surveillance data is the facility where the data emanates. Thus, health facility should be able to process their own data.

5.1.6.3 Analysis

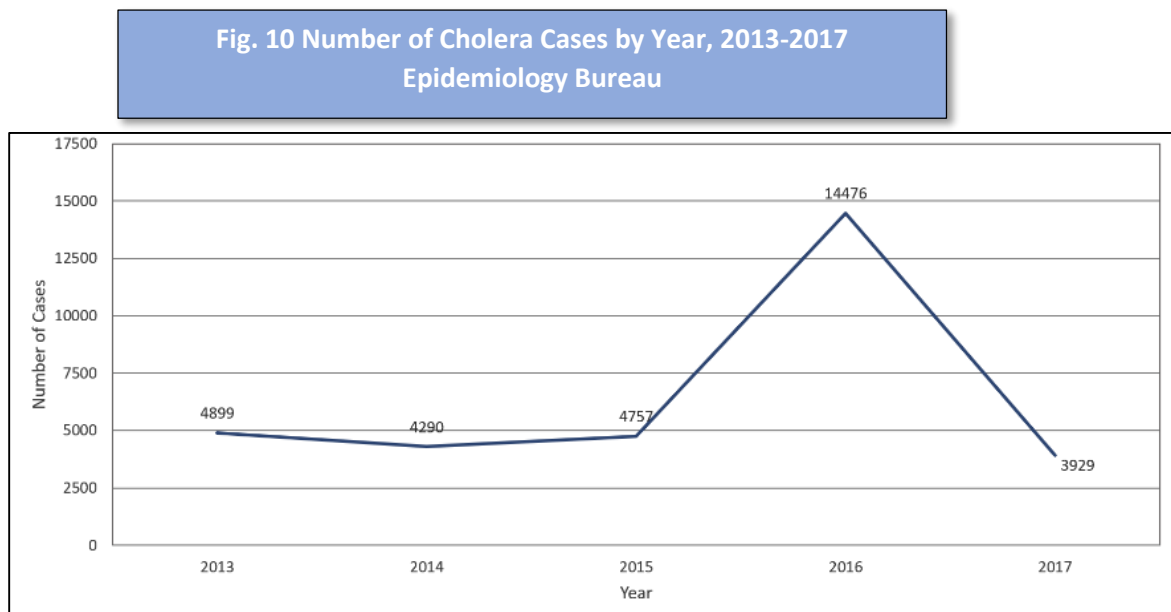
For the disease surveillance system to monitor trends of a disease and detect clustering of cases, surveillance data should be analyzed regularly. Ideally each of the data reporting unit should analyze their data. Whether the basic analysis will be done manually or through a data base program, DRU should check on the completeness, accuracy and consistency in the data collected. Analyze the data in terms of time, person and place.

a. Analyze Data by Time

Time analysis review data in terms of seasonality of a disease (certain period wherein a disease occur); or a change in frequency (an increase or decrease) in a present time as compared in the past. There is an interval/delay that can be measured between the exposure and the appearance of the problem. Time intervals that is of importance to surveillance:

- ✚ Incubation period: refers from the time of exposure to the appearance of the signs and symptoms;
- ✚ Interval between the appearance of signs and symptoms and when the diagnosis is made;
- ✚ Interval between diagnosis and actual reporting and inclusion of the disease in the surveillance data.

Presenting no. of cases reported by specific time period (by weeks; by months; or by years (Figure 10)

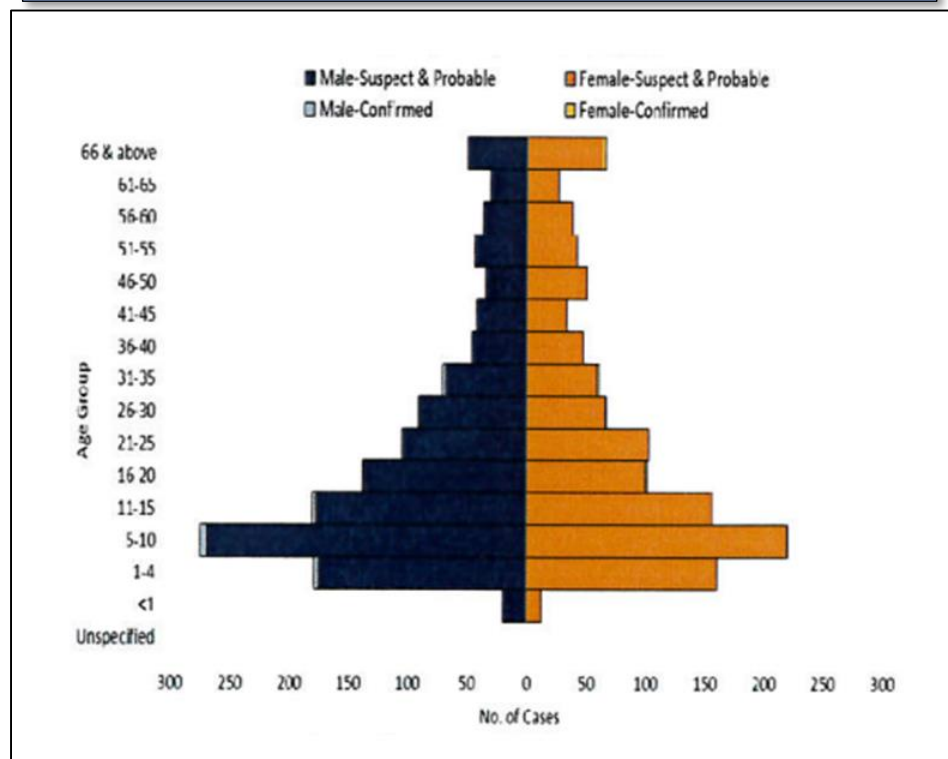


Source: Data source: Epidemiology Bureau, Department of Health

b. Analyze Data by Person

Person analysis of surveillance data describes the characteristic of the population at risk. Demographic variables may be used such as age, gender or ethnicity. Age is the most important variable as majority of health events differ with age. Other factors associated with age includes incubation period, host susceptibility, physiology of the response and opportunity for exposure (MOP, PIDSR). Figure 11 represents an analysis done to describe age and sex characteristics of cases.

**Fig. 11 Typhoid Cases by Sex and Age group (N=2525)
Philippines, January to March 3,2018**



Source: Food and Waterborne Disease Morbidity Week 1-9, Epidemiology Bureau, Public Health Surveillance Division

Another simple analysis is the count of cases expressed in rates. Annual notification rates can be useful in assessing the impact of changes in policy at the national level such as changes in the way food are processed; national campaigns to improve food handling at home and enforcement of food safety regulations (WHO 2017). However, it should not be used as primary data in detecting outbreak as it can only be calculated at the end of the year. Box 6 provides a guide in calculating notification rate:

Box 6 How to calculate annual notification rate



1. Extract the number of diarrhea notification each year over the past five years from your surveillance data.
2. Obtain the population estimate each year over the past five years.
3. Put the data in a table and ensure there is a title in each column as shown below.

Year of notification	Number of Cases notified	Population estimate
2013	22938	7,500,859
2014	26598	7,733,386
2015	29261	7,974,131
2016	29096	8,222,626
2017	29743	8,479,312

4. Calculate notification rate per 100,000 population (number of cases/population estimate x 100,000)

Year of notification	Number of Cases notified	Population estimate	Notification rate
2013	22938	7,500,859	306
2014	26598	7,733,386	344
2015	29261	7,974,131	367
2016	29096	8,222,626	354
2017	29743	8,479,312	351

Note: The numbers above do not pertain to an actual data of a particular locality. The numbers are used to illustrate calculation of notification rate.

c. Analyze Data by Place

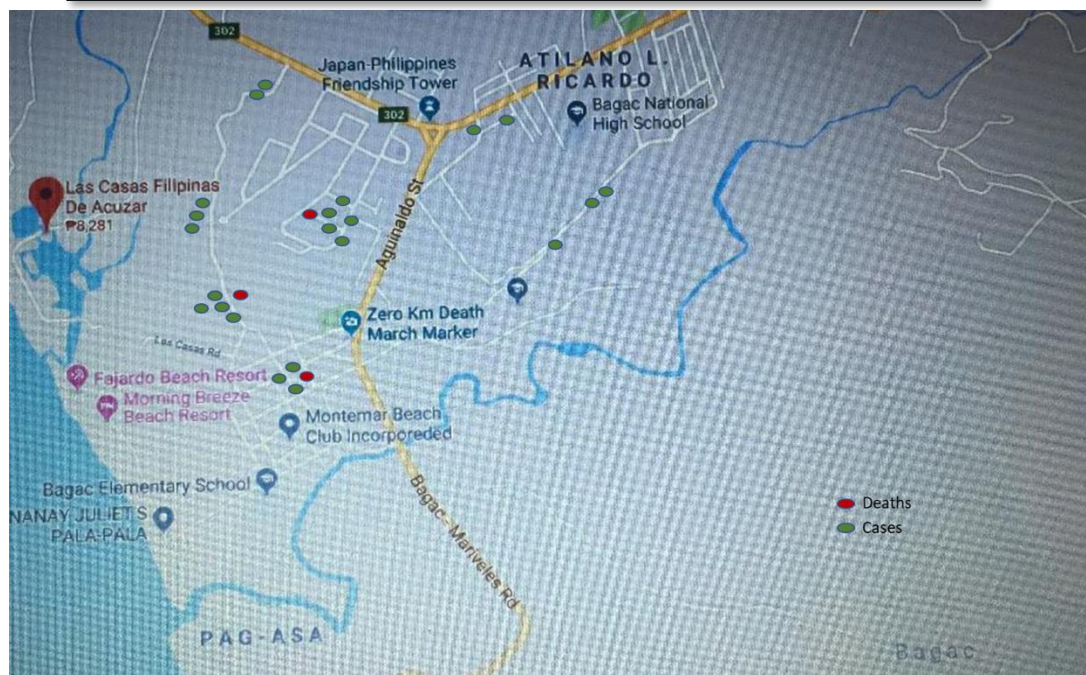
Place analysis is examining the data by place where the disease condition **occurred**. Maps are commonly used to graphically represent the data and provide other important information obtained by analyzing data by place:

1. Areas with highest rates of the disease being described are easily identified which can facilitate in finding the causes and instituting intervention;
2. Characterize the population involved in terms of density and distribution;
3. Existence of health facilities (hospitals, clinics, BHS, RHUs) that can be used for management and treatment of cases; emergencies; or evacuations;
4. Presence of environmental resources (rivers, lakes, dams, streams, land forms and vegetation) that maybe useful in the analysis of the disease condition.

A hypothetical situation is given below to illustrate the use of spot map to describe analysis of surveillance data by place.

A spot map should show all important structures such as school, resorts, food establishments. Figure 12 below demonstrates a spot map of showing the distribution of diarrhea cases and deaths across the geographical area.

Figure 12 Illustration of a spot map



5.1.6.4 Interpretation

In interpreting the data, compare the present data with previous weeks, months or years and note if the number of notified cases or deaths of a specific food and water borne disease or syndrome shows an increasing, decreasing or stable trend. Then determine if the threshold for action has been reached for a certain disease or syndrome. Thresholds are indicator when something should happen or change and serves as a decision guide as to when and what actions to be taken

Alert threshold refers to the level of a disease occurrence that serves as an early warning for epidemics. An increase in the number of cases above the alert threshold warrants an investigation, check epidemic preparedness, and implement appropriate prevention and control measures. Calculation of alert threshold is shown in Box 7.

In summary, the responsibility of surveillance (for human health) activities can be shared across different agencies as shown below.

Office/Person	Tasks
BHS/RHU/Hospitals	<ul style="list-style-type: none">• Detects cases• Record (completely fill-up)/report cases timely• Analyze data (person, time and place)
Local ESUs (CESU/MESU/PESU)	<ul style="list-style-type: none">• Collects data and validates report• Consolidate and analyze data• Submits report to RESU• Provides feedback to health facility
Regional FWBD	<ul style="list-style-type: none">• Facilitates/assists in the collection of reports
RESU	<ul style="list-style-type: none">• Collects and validates report from provinces• Consolidate, analyze reports and provide feedback to provinces• Provides data on FWBD cases and death report to Regional FWBD Coordinator• Submits report to EB
EB	<ul style="list-style-type: none">• Consolidates report• Provides weekly report to FWBD Program Manager

Box 7: How to calculate a five-year average for defining a simple alert Threshold for diarrhea

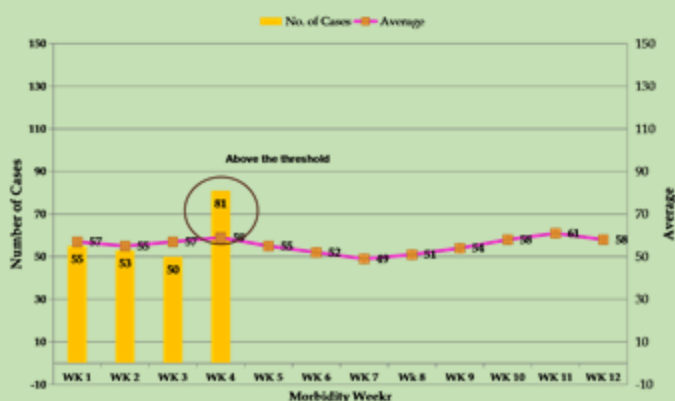


1. Extract the notification data of diarrhea from the data base for each morbidity week for the past five years
2. Put the data in a table as shown below (the number of cases shown are not true data from a specific area but hypothetical data for demonstrating the steps for determining alert threshold). There are 52 morbidity weeks for reporting that should be filled-up. The illustration only showed 12 weeks for purpose of illustration.

52 Morbidity Weeks	Number of Cases notified by year						Average
	2013	2014	2015	2016	2017	2018	
1	54	49	58	60	65	55	57
2	48	52	60	57	59	53	55
3	52	55	63	55	61	81	57
4	55	57	60	59	63		59
5	50	55	58	54	60		55
6	48	52	54	51	57		52
7	45	49	50	48	54		49
8	47	52	52	50	56		51
9	50	54	55	53	59		54
10	53	57	59	58	62		58
11	57	61	63	60	65		61
12	55	60	59	57	60		58
↓							
52							

3. Calculate 5-year average number of diarrhea notifications for week 1, using the week 1 data from the past 5 years. Repeat this for each of the weeks in the year.

4. Plot the data



5.2. Other Surveillance System Related to FWBD

Animal Health surveillance and water quality surveillance are also important component of FWBD-PCP. The systems are lodged in their respective agencies, but any positive findings shall be reported to EB or to their respective RESU/PESU/CESU.

5.2.1. Water Quality Surveillance

Administrative Order No. 2017-0100 (Philippine National Standards for Drinking Water of 2017) provides the standards and procedures on drinking water quality to protect public health. The policy covers all drinking water service providers including government and private developers and operators. Only laboratories accredited by DOH shall perform quality examination for drinking water. The East Avenue Medical Center is the National Reference Laboratory for water quality surveillance.

5.2.2. Surveillance in Unprocessed Food (Veterinary Surveillance)

Veterinary surveillance is the collection of information about diseases (bacteria, viruses) affecting animals that can pose a disease in humans when ingested.

5.2.2.1. Bureau of Animal Industry: Provide the standard procedures for active surveillance, isolation and confirmation of the agent (bacteria, viruses) from animals and its by-product.

5.2.2.2. National Meat Inspection Service: Implements Pathogen Reduction Monitoring and Surveillance Program to ensure that meat and meat products are safe for consumption.

5.2.2.3. Bureau of Fisheries and Aquatic Resources: BFAR fish inspectors and local sanitary officer (at the LGU) have the responsibility to implement the Sanitation Standard Operating Procedures (SSOP) and Good Manufacturing Practices (GMP) both at fish landing sites and wet markets. The BFAR fish inspector also conducts regular monitoring of fish processing plants to ensure that fish and fish products meet the quality standards for human consumption.

5.2 Outbreak response

5.2.1 What is the role of FWBD-PCP in the outbreak response for FWBD outbreak?

The **FWBD-PCP Regional program** coordinator should be part of the EICT during an outbreak investigation and response activity. The Regional Coordinator should mobilize the provincial designated FWBD coordinator and assist in the investigation and institution of control measures. The Regional FWBD Coordinator should coordinate with the National FWBD Program Manager for any logistical needs (rehydration fluids and drugs) during the outbreak. He/She should follow-up the provincial FWBD coordinator on the actions taken regarding the recommendations to prevent similar outbreaks.

The **FWBD Program Manager** provides logistical support (antibiotics, rehydration fluids, IEC materials) during the outbreak response. He/She should facilitate mobilization of resources through coordination with other national agencies if needed. He/She should ensure the FWBD Regional Coordinator is actively providing support during outbreak response. Using the learnings from outbreak response reports, he/she should lead the discussion in the Technical Working Group of problems/issues encountered during outbreak response and agrees on actions for stronger collaboration at the local level.





5.2.2 Detection of a food and water-borne outbreak

What is food and waterborne disease outbreak?

A foodborne outbreak occurs when two or more people develop a similar illness after ingesting the same contaminated food or drink (WHO, 2008). Food and water may be contaminated at any stage in the food and water production pathway.

How are outbreaks detected?

Reports of outbreaks or possible outbreaks may come from:

-  Analysis report from the indicator-based surveillance (PIDSR);
-  A food related event reported to the Event-based surveillance;
-  A report from laboratory-based surveillance;
-  A media report or community rumor;

Who confirms and how to confirm an outbreak?

The physician or the nurse in the health facility should investigate to confirm the existence of an outbreak through:

- + Compare the current number of cases with the previous weeks, months or year to determine if the alert threshold has been surpassed;
- + Mapping of cases and observe whether there is clustering in certain sitios/villages or barangay;
- + Determine the magnitude of the illness. Check with the Provincial Health office and nearby hospitals or clinics for similar cases or number of deaths reported from possible waterborne or foodborne related events;
- + Check for other events prior to sudden increase of diarrhea cases such as big events (weddings, burials), flooding
- + Check laboratory results of suspected cases for confirmation of diagnosis

Who declares the presence of a food and water-borne outbreak?

The Local Chief Executive can declare an outbreak as mandated by the Local Government Code of 1991. The declaration of an outbreak should be supported by surveillance data and the above steps for confirming the outbreak has been done thoroughly.

However, PIDSR MOP states the provision of the DOH Rules and Regulations Implementing the Local Government Code of 1991 (**DOH RRILGC of 1991**), *Chapter 11, Section 44 c, as follows the Department of Health has the final decision regarding the presence of epidemic, pestilence, or other widespread public health danger in a particular area or region. In compliance to this rule, the Secretary of Health shall have the sole authority to affirm or reverse any declaration of an epidemic*

EB as the IHR focal office shall take the lead in the investigation of **epidemics of national and international importance**, in coordination with the CHD, local government unit, and other concerned agencies. The Secretary of Health shall have the sole authority to declare epidemics of national and/or international concerns. Annex R enumerates conditions of national or international concern.

5.2.3 Food and water-borne outbreak investigation

Why investigate a FWBD outbreak?

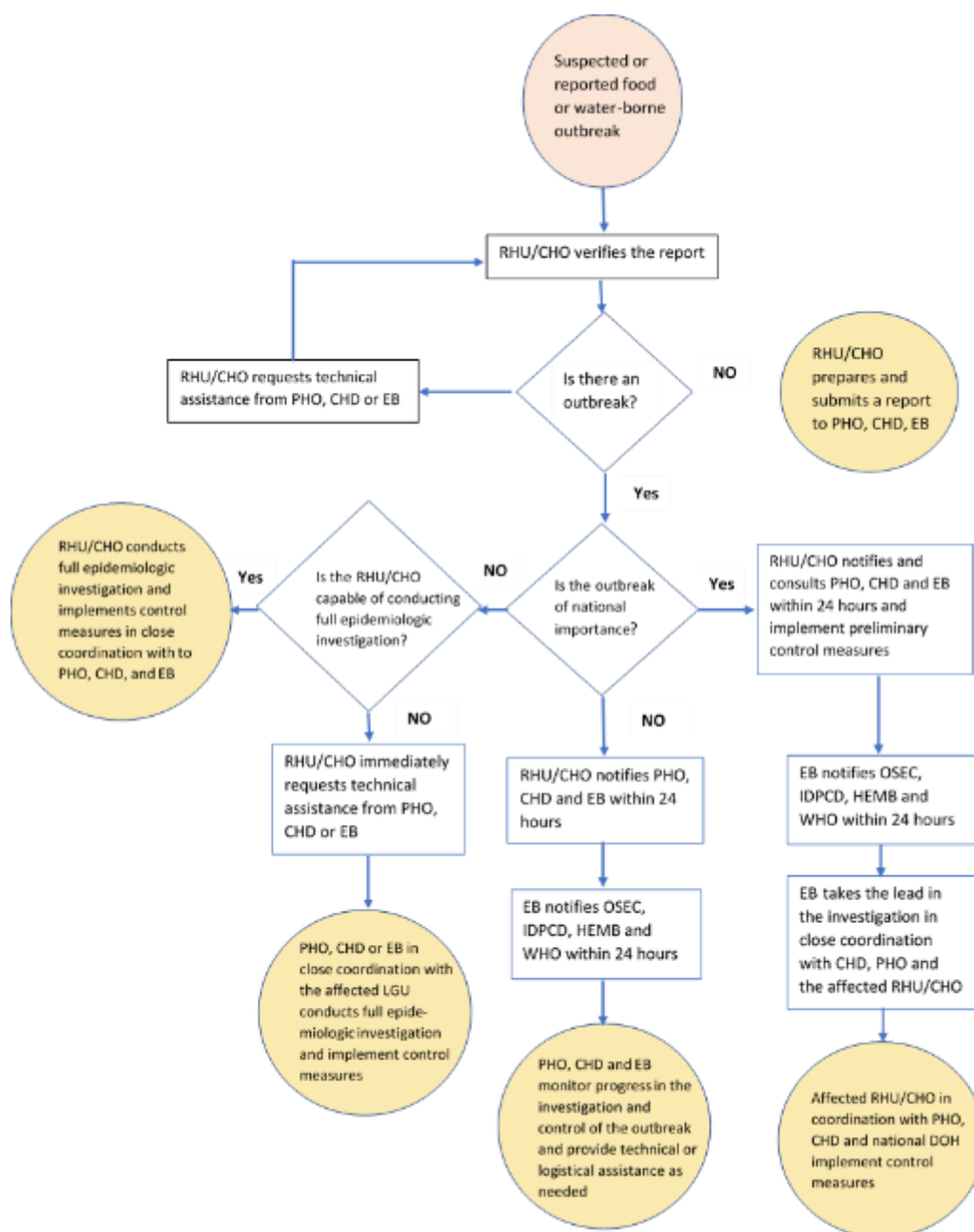
A food and water-borne outbreak indicates a break in the food production pathway and contamination set-in. Investigating a food and water-borne disease outbreak will:

- ✚ Decrease the number of people affected and prevents death by limiting the further spread of the illness/disease;
- ✚ Determine the cause and institute measures to mitigate the risk of recurrence;
- ✚ Information obtained from identifying the cause and risk factors are crucial in improving the existing preventive and control measures for all partners involved in the program;
- ✚ Outbreak experience and information obtained during actual investigation activities will be helpful in preparing similar outbreaks in the future;

How will the LGU proceed if a possible FWBD outbreak is detected?

The guide in Figure 13 provides the steps to follow in detecting and responding to a possible FWBD outbreak. These steps were defined by the Epidemiology Bureau to cover all reported/suspected outbreak. **The FWBD-PCP is not defining a parallel system but adapting what is written in PIDSR MOP.**

Fig. 13 Flow of Investigation, Reporting and Response to a Suspect/Reported FWBD Outbreak



Source: *Manual of Procedures for Philippines Integrated Disease Surveillance and Response 3rd Edition; Epidemiology Bureau, Department of Health*

5.2.3.1 Determining Authority and Responsibility






In a FWBD outbreak (local), the authority resides in the Local Chief Executive (LCE) as mandated by the Local Government Code of 1991. The LCE appoints the MHO/CHO, as the head of the health unit in the area, to lead a team (local staff and experts) in the investigation. He has the authority to mobilize resources, coordinate with other local agencies during the investigation and implementation of control measures. He/She is also responsible in communicating with the CHD, EB in relation to the said outbreak. The MHO/CHO is also accountable to carry out the directives of the Local Chief Executive regarding outbreak.

The Epidemiology Bureau (through the RESU/PESU/CESU), Food and Waterborne National Program Manager(role) or the Regional FWBD Coordinator, RESU or the Provincial Health Office should provide assistance to the local government unit during outbreak investigation and response. The assistance can be in three forms: a) Logistics (supplies, equipment, IEC materials etc); b) Technical advice (verbal or written guidance); c) technical assistance (investigation team, experts or consultants who will go to the field and assist in the investigation or with the control measures); and d) laboratory back-up.

*However, EB will lead the outbreak investigation in cases wherein the outbreak is of **national and international concern**. Likewise, HEMB will be notified/mobilized in situation of human crisis/emergencies.*

5.2.3.2 Epidemic Investigation and Control Team (EICT)

After confirming the presence of an outbreak, the Epidemic Investigation and Control Team (MOP, PIDSR) should immediately be organized for the preparatory work needed during the outbreak investigation. Epidemic investigation and response require varied skills and expertise (multi-disciplinary approach). Ideally the team should be composed of the following:

-  Municipal Health Officers
-  Regional FWBD Coordinator and Health Educators
-  Food safety officers
-  Laboratory personnel;
-  Clinicians or other technical experts needed in the investigation;

- ✚ Personnel from agencies working on animal health such as meat inspectors/DA/BFAR staff);
- ✚ Sanitary officers/inspectors/engineers;

The EICT members should have a clear understanding of their roles during the epidemic investigation and response. Reporting lines should be set prior to actual field investigation. As stated in the PIDSR, the core function of the EICT is listed in Annex S.

5.2.3.3 Communication

After the declaration of the epidemic and until the epidemic has been declared as over; stakeholders, media, health workers and other people with interest on the epidemic should be informed on the progress of the investigation, interim results and actions taken to control the epidemic. Thus, it is important during the preparation phase to discuss the communication process. Any communication on the outbreak should be cleared by the Team leader (MHO/CHO) to ensure information are accurate and consistent. The MHO/CHO may designate the Nurse (PHN) as the point person for any update or report for consistency and mitigating the risk of miscommunication or conflicting information. Table 13 provides the purpose and methods of communication across the different audience groups

Table 13: Methods and Purpose of Communication with Different Groups During FWBD outbreak Investigation

Audience Group	Purpose of Communication	Method of Communication
<i>Health Authorities and other government stakeholders</i>	<p>To ensure accurate case finding</p> <p>To facilitate the implementation of control measures</p> <p>To inform partners in other administrative areas who may benefit from the information about the epidemic and may be able to provide additional information about similar outbreaks</p> <p>To ensure government officials are updated about the status and progress of the investigation</p>	Established communication channels-such as regular meetings, briefer or reports

<i>Health Care Providers</i>	<p>To ensure accurate case finding</p> <p>To facilitate the implementation of control measures</p>	Regular meetings
<i>People directly affected by the outbreak</i>	<p>To respond to concerns</p> <p>To provide advice on personal hygiene measures to reduce the risk of person-to-person spread</p>	<p>Method of communication will depend on the local situation, but may include contacting those affected by:</p> <ul style="list-style-type: none"> - phone, mail - face-to-face meetings
<i>The public</i>	<p>To provide accurate information about the epidemic</p> <p>To provide accurate information on implicated food and how they should be handled</p> <p>To provide advice on personal hygiene measures to reduce the risk of person-to-person spread</p> <p>To identify additional cases</p> <p>To alleviate fears and manage rumors</p>	<p>Method of communication will depend on the local situation, but may include:</p> <ul style="list-style-type: none"> - regular press releases via newspapers - radio or television announcements - leaflets delivered to households and public gathering places - face-to face advice in clinics - messages displayed on notice boards and shared with consumer groups
<i>The food establishment</i>	<p>To ensure their ongoing cooperation with the investigation</p> <p>To facilitate the implementation of control measures</p>	Face-to face meetings with members of the EICT
<i>The media</i>	<p>To facilitate case finding through enhanced reporting of cases by the public and medical practitioners</p> <p>To inform the public about avoidance of risk factors for illness and about appropriate preventive measures</p> <p>To maintain public and political support for disease investigation and control</p> <p>To minimize the appearance of conflicting information from different authorities (which may undermine their credibility)</p>	<p>Identify media spokesperson, who may be a disease expert and a media relation officer to manage all media inquiries</p> <p>Arrange a specific time to meet with the media. This may involve daily briefings.</p> <p>Ensure that information provided is timely, accurate and consistent</p> <p>Ensure that information released to the media has been authorized by the EICT</p>

Source: *Strengthening Surveillance of and Response to Foodborne Diseases: A Practical Manual. Stage 1: Investigating Foodborne Disease Outbreak*; WHO 2017,

5.2.3.3 Logistics

All logistic requirements should be prepared which includes: a) transportation of the team to conduct environmental investigation and interview of patients and collection of specimens; b) transportation of specimen to the laboratory; c) packing boxes for specimens; d) material for specimen collection and water collection for water analysis; e) ORESOL and other rehydrating fluids; f) IEC materials; g) antibiotics for treatment of patients.







The FWBD-PCP Program Manager through the FWBD Regional Coordinator will provide the rehydrating fluids (ORESOL), antibiotics (if needed) and IEC materials. The transportation cost of EICT members from the regional/national staff will be charged under their sending agencies as include in the AO. The LGU may provide other logistics in the implementation of control measures such as transportation costs in the chlorination of water sources.

5.2.3.4 Record Keeping

During the preparatory period, task a member of the EICT to be in charge of ensuring all records pertaining to the investigation are properly filed. These records are used for response, evaluation, audit purposes, future review, and legal purposes to ensure accountability of public health.

What should be recorded?

All records on the investigation of the FWBD outbreak will follow the provision of the data privacy law. The following are some suggested documentation records:

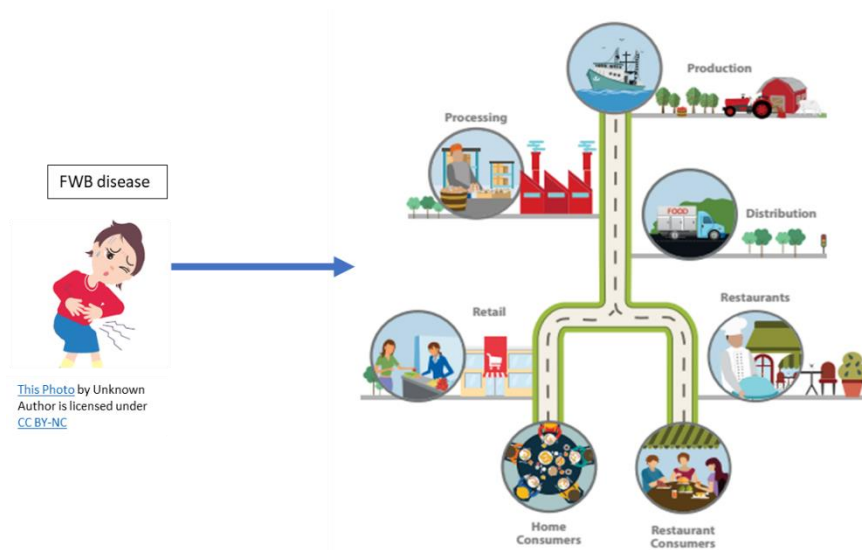
-  Each member should keep a record of all activities conducted during the investigation;
-  Minutes of meetings should be distributed among team members only (marked confidential);
-  Action notes and agreed decision points should be documented;
-  Notes and other records (investigation forms) from epidemiologic, food, environmental and laboratory investigations should be stored in file specific to the outbreak (hard and e-copy);
-  Telephone log and emails pertaining to the epidemic investigation;
-  Copies of all communications released including letters, fact sheets, public notice and media reports

5.2.3.5 Identifying the point of contamination

To identify the point of contamination in a FWBD outbreak, EICT should “trace back” the food and water production pathway. Trace back starts with the sick person. Then the investigators will trace back the implicated cause of illness (ingestion of food or water). It traces back to the place where food is prepared and cooked. The trace back continues to trace backwards into the distribution channel and the production area until the origin was reached (Fig. 14). Trace back process is being done to achieve the following (WHO 2017):

- Identify the source and distribution of foods so that the public is alerted and the removal of the contaminated production from the market place (product recall;
- Compare the distribution of illnesses and of the product in order to strengthen a suspected epidemiological association;
- Determine the potential route or source of contamination by evaluating common distribution sites, processors, growers

Fig. 14 Trace Back Path of FWBD to the Food/Water Production



Source: *Strengthening Surveillance of and Response to Foodborne Diseases: A Practical Manual. Stage 1: Investigating Foodborne Disease Outbreak*; WHO 2017,

Food trace back process requires coordination of many investigators from different agencies and organizations. It entails a detailed review of dates, quantities, source and conditions of food received, information on lot number, facilities involved and production dates.

Food and environmental investigation: is a part of the outbreak investigation. The objective of doing food and environmental investigations are the following:

- ✚ To identify the source and mode of contamination;
- ✚ Assess the likelihood that pathogens survived processes designed to kill them or to reduce their numbers;
- ✚ Assess the potential for growth of pathogens during food processing, handling or storage;
- ✚ Identify and implement ways to fix the issues identified.

Environmental investigation through the sanitary inspector and any member of the team shall determine the conditions at the time the suspected food was prepared. In conducting environmental investigation, certain records should be secured and reviewed. The amount of physical evidence may decrease quickly thus immediate food and environmental investigations should be done as soon as possible.

Investigation of food establishment:

If a food business is being considered as the source of the outbreak, certain activities should be done during the investigation

- ✚ Interview with managers;
- ✚ Interview with employees who may have a role in the processing or preparation of suspected food;
- ✚ A review of employees' record (to determine who were sick during those period);
- ✚ A review of the overall operations and hygiene;
- ✚ A full process reviews of the specific food suspected to be the source of the outbreak;
- ✚ Food and environmental sampling;
- ✚ A review of food handler health and hygiene which include collection and analysis of clinical specimen from food handlers with symptoms;
- ✚ An assessment of the water supply system;

- ✚ An assessment of the toilet facilities and sewage disposal system;
- ✚ Measurement of temperatures in refrigerators or food and pH and water activity of food using appropriate equipment

Interview food handlers:

All food handlers should be interviewed. Important information to be obtained includes the exact flow of the suspected food; the condition of the food when received by food handlers and any unusual working conditions on the day the food was prepared, processed and cooked. It is also relevant to know the list of food handlers that had been sick/absent during the period. Clinical specimen should be taken from sick food handlers.

Food and Environmental sampling:

A) Food samples:

The sampling of food for laboratory analysis of microbial agent should be guided by the epidemiologic and environmental investigations. However, if an implicated food has not been identified, several sample foods maybe collected and stored for future laboratory testing after more information becomes available. Food samples that may be appropriate for sampling and testing includes (in order of importance):

- ✚ Leftover food from the suspected meal;
- ✚ Ingredients that were used in the implicated food;
- ✚ Food from the menu that was associated with the outbreak epidemiologically;
- ✚ Food that is associated with suspected pathogen;
- ✚ Food in the environment that may have nurtured the growth or survival of the pathogen

If a packaged food is implicated as the culprit in an outbreak, it is essential to collect unopened package (ideally from the same batch). It may help determine the time of contamination (if before or after the preparation period). Also collect samples of the ingredients or raw materials.

The EICT should closely coordinate with the laboratory for appropriate sample size; collection process; storage and transportation.

B) Environmental samples:

Environmental samples are collected to trace the source and evaluate the extent of contamination that led to the outbreak. Environmental samples should be taken from work surfaces; food contact surfaces of equipment, containers and other surfaces such (refrigerators, door handles); and water used for food processing.

5.2.4 Control of the Outbreak

The fundamental goal of an outbreak investigation is to limit the spread of the illness and prevent the recurrence of similar illness. Control measures should be instituted immediately to minimize the severity of the effect on the population at risk (minimize the number hospitalized or death). Below are some control measures that can be instituted (WHO 2017).

5.2.4.1 Controlling the source

- a) The local health office (MHO/CHO/PHO) should release a health advisory to the public to throw away the suspected food from the suspected establishment, gathering/events (such as wedding) immediately;
- b) The local government administration through the health office shall execute temporary closure of the food establishment, processing plant, water work system or refilling station until the problem has been resolved;
- c) Modify food production or preparation process such as reorganization of working practices, change in storage temperatures;

5.2.4.2 Controlling the transmission

1. Issue public advice on boiling of water, proper preparation of food, safe disposal of foods, cooking or avoiding unpasteurized products, personal hygiene measures such as hand washing;
2. Exclusion of infected people from work or school: This should be done by health authorities in accordance with the local laws and regulations. Sick people who may be asked to stay away are food handlers specially those who are assigned to touch unwrapped foods that will be consumed raw or without further cooking or treatment process

.2.5 Declaring that the outbreak is over

The Local Chief Executive upon the advice of the leader of the EICT team leader should declare when an outbreak is over and should issue a statement. An outbreak is over when the number of cases falls back to the expected level.

After the outbreak, there should be a structured review with all the people involved in the outbreak response. A debriefing should be done to a) ensure the control measures instituted were effective; b) identify resource needs, structural changes, needed improvement in the outbreak response for future outbreaks; c) identify factors that compromised the investigation and discuss solutions; d) discuss legal issues that arisen; e) update current guidelines if needed.

5.2.6 Communicate the Findings

The final step is to prepare a report. The report should contain a summary of the outbreak data, findings, conclusions, control measures and recommendations to improve responses for future outbreaks or improvement to prevent recurrence of similar outbreaks. The purpose of the report is to a) serve as documentation/record of the investigation; b) provide recommendations for control and preventive actions; c) serve as supporting documents for any possible legal issues; d) manifest areas of improvement for the EICT. The outbreak report should be done by the EICT team leader in coordination with the technical experts.



Section VI: Health Promotion and Communication

The content of this section:

- General Guidelines
- Basic Concepts
- Risk Communication
- Communication plan
- Other advocacy materials

6.0 Health Promotion and Communication

6.1 General Guidelines

6.1.1 The FWBD-PCP, in coordination with Health Communication and Promotions Service (HCPS), will develop the national Health Promotion and Communication Plan in support and towards the achievement of the goals and objectives of the National Strategic Plan 2019-2023.

6.1.2 The FWBD-PCP is responsible in disseminating and orienting the regional and provincial Health Education and Promotion Officer (HEPO) on the Health Promotion and Communication Plan (HPCP) of the program.

6.1.3 The FWBD-PCP collaborates with HC in the development of all educational and advocacy materials (posters, fliers, flip charts).

6.1.4 The FWBD-PCP ensures all developed materials and prototype reached the health facilities.

6.1.5 The FWBD-PCP will provide additional communication materials during outbreak and health emergency situations (as needed by the local government units).

6.1.6 The FWBD-PCP ensures the integration of FWBD strategies and activities in the Regional HPCP. And as part of its supportive supervision, the FWBD-PCP Manager assists in the monitoring of the Health Promotion and Communication Plan (regional and provincial) in relation to food and water-borne diseases.

6.1.7 The FWBD-PCP Manager ensures dissemination of National Health Advisories on food and water-borne diseases.

6.1.8 The Regional FWBD-PCP coordinator ensures the integration of the FWBD-PCP strategies and activities in the Regional HPCP.

6.1.9 The Regional FWBD program coordinator should provide technical assistance to the province in developing and incorporating the FWBD-PCP strategies in their annual HPCP.

6.1.10 The Regional and Provincial HEPO may develop their own local promotional and communication materials in addition to those distributed by the national office. The Regional HEPO should ensure that the messages (technical content) had been reviewed by technical experts in the field.

6.2 Understanding Basic Concepts

6.2.1 Health promotion

It is important element of disease prevention program as it empowers individuals and communities to make better choices and reduce their risk of developing the disease or a disability. Health promotion and disease prevention programs often deals with the social determinants of health which influence changeable risk behavior (RHI Hub).

Health promotion the process of enabling people to increase control over and improve their health focusing not only in the individual behavior but also the social and environmental interventions

Source: WHO

Social determinants of health are the circumstances in which people are born, grow up, live, work and age and the systems put in place to deal with illnesses. These circumstances are in turn shaped by a wider set of forces: economics, social, policies and politics (WHO). As these social determinants had been with individuals throughout their life, it had influenced their habits and practices which to some extent became barriers to health.

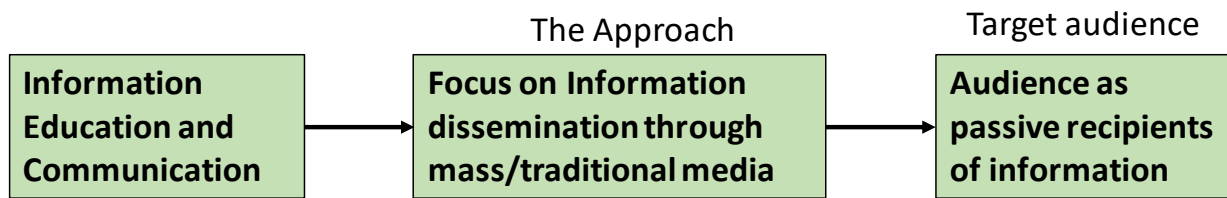
6.2.2 Health communication

It is the study and use of communication strategies to inform and influence individual decision that enhance health (CDC). Health communication includes verbal and written strategies to influence and empower individuals, populations and communities to make healthier choices.

Communication has an important role in managing disease outbreak because accurate and timely information at all levels is critical in maximizing the effective outcome of the response and minimizing unwanted and unforeseen disruption in the society and economy (WHO).

In the past, health workers believe that people change their behavior easily after being given information on certain diseases or the risk for a disease in their behavior (diarrhea is caused by contaminated water or not practicing proper handwashing can cause illnesses). Various IEC materials (leaflets, fliers, posters) and information campaign was done. But, most of the audience were passive recipient (Fig. 15).

Figure.15 Communication Approach Through IEC



Thus, it did not translate to change in behavior; because long term behavior change involves several stages. This is the core principle of Behavior Change Communication.

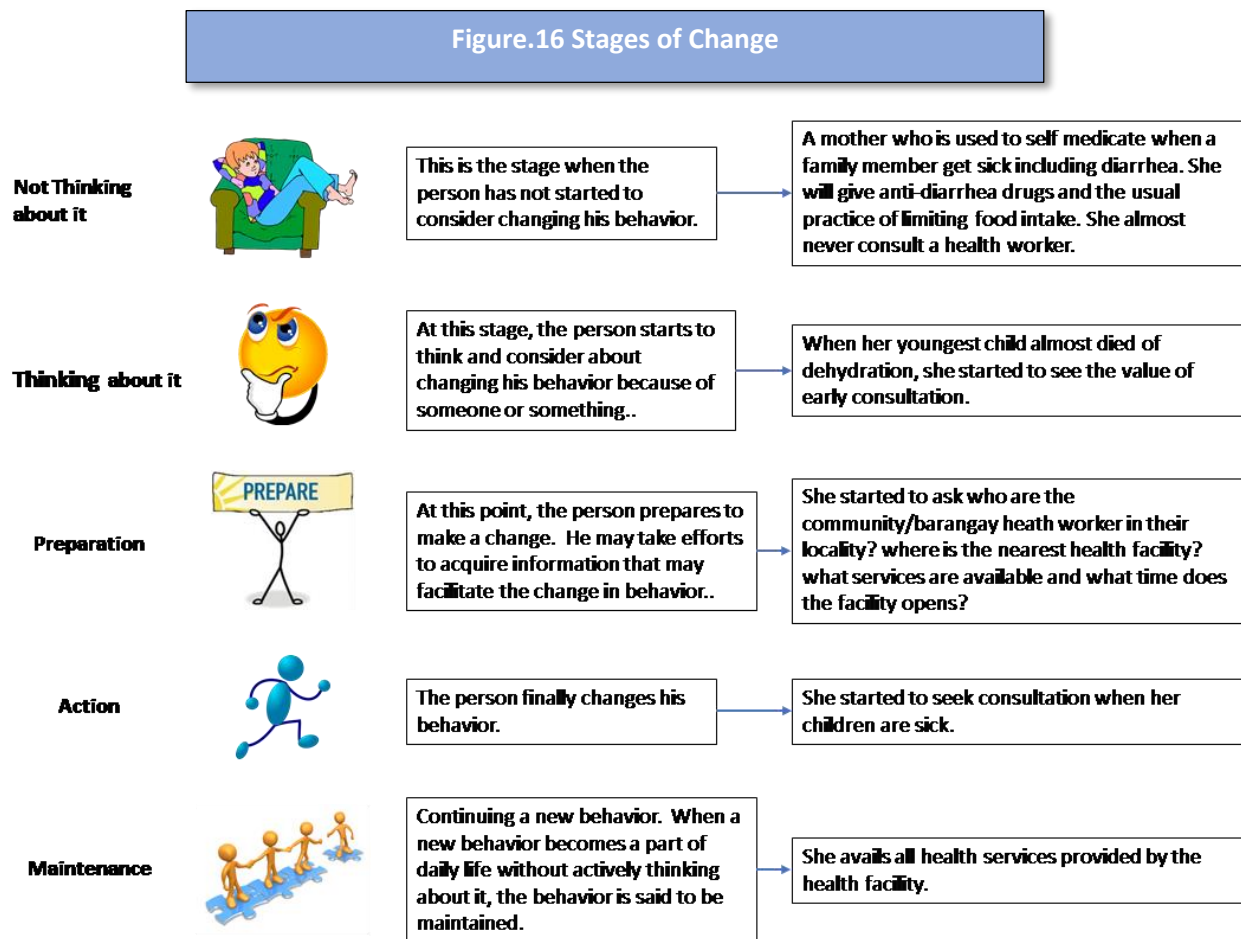
6.2.3 Behavior Change Communication

Behavior change communication is a process of making positive permanent change to behavior and habits such as proper handwashing, personal hygiene practices, early health seeking behavior – early consultation when signs and symptoms of food and waterborne diseases has been identified. It means that messages are carefully designed according to target audience and made available using the appropriate medium (radio, peer education, drama, leaflets and posters) to the right group of people at the right time.

Before people and communities can reduce their risks to a particular health issue, they must first:

- ✚ Understand the basic facts about the health issue;
- ✚ Believe that they are and others in the community are at risk;
- ✚ Gain the knowledge on how to reduce the risks;
- ✚ Have access to products and services that will help change their attitudes and behaviors;
- ✚ Believe that others in the community feel that a change in behavior is necessary (Pacific BCC Manual)

According to BCC, people and communities maybe in the different stages of change when they received or hear the information and these affects how people respond to it. For change in behavior to occur, the health worker needs to understand the various barriers and addressed them. Understanding the different stages of change (Fig. 16) will help us understand our audience so we can tailor the message and determine the right time to deliver the message. It is important to remember **that change is slow process.**



A person may enter and leave these five stages anytime. For some individuals, it will take time to get in the maintenance stage. For people to maintain their new health behavior, there should be:

a) Supportive environment:

- ✚ Supporting change at the individual level – developing the skills of the person so they can adapt the new healthy behavior (informing the mother the array of health services available in the facility). It is important for the health worker to understand that there are certain factors that is beyond the person's control and may affect his decision to make the change. Thus, it will be helpful to still provide support and consistent follow-up until the person's condition improves.
- ✚ Supporting change at the community level – looking at the total social and community environment (presence of community volunteers and community meetings;
- ✚ Promoting change at the government level (policies, resources that enable and encourage behavior change (accessibility of services even in the far-flung sitios

b) Community engagement: Community participation and ownership is important for people to take on new behavior. When a community perceived that it is their health problem, they can support each other in making the change.

6.3 Risk Communication

Risk communication is an integral component of public health risk management. It is a two-way communication process (dialogue) between those affected (population at risk) and the concerned people (health worker and program managers) during all phases of public health event (outbreaks and human crisis situation) to encourage informed decision making, positive behavior change and maintenance of trust (PAHO).

The goals of risk communication are to share vital information to save lives, protect health, minimize harm to self and others and to change beliefs or to change behavior. It may serve to (Gaya, 2014):

- ✚ Raise awareness;
- ✚ Encourage protective behavior;
- ✚ Inform to build up knowledge on hazards and risks;
- ✚ Inform to promote acceptance of risks and management measures;
- ✚ Inform how to behave during events;

- ✚ Reassure the audience (reduce anxiety and manage outrage);
- ✚ Improve relationships (build trusts, cooperation and networks);
- ✚ Involve actors in decision making;
- ✚ Enable mutual dialogue and understanding

These goals should be monitored and assessed the changes in knowledge, behavior, and practice. Unmonitored outcome leads to ineffective risk communication messages; consumes and waste resources and create a false sense of achievement.

Why is risk communication a two-way process?

Risk communication is a two-way process because the perception of risk of the population differs from the health experts and managers. For the health experts, risk is great when the hazard is great (the exposure to the hazard and the vulnerability of the exposed population. Thus, experts look at risk in terms of morbidity and mortality or financial losses (economic or trade). For the public, the magnitude of risk depends on their emotions (fear, anger, outrage) that is influenced of their perceived effect of the outbreak in their personal lives (the chance he or a family member get the diseases or being hospitalized or affecting their source of income. People's perception of risk are also affected by their education, culture, belief and past experiences.

6.3.1 Analysis of the Situation

To develop effective messages during outbreak response, an analysis of the situation should be done during the early stage of the outbreak. The following are suggested steps in analyzing the situation:

Identify affected or potentially affected population (the target audience for the messages): The population most vulnerable to the suspected disease for the outbreak.

Identify behavior factors that might place the person at risks: Observe or conduct one-on-one/group dialogue to identify existing behavior that put persons at risk (buying from street food vendors, drinking water from doubtful sources).

Identify partners that can help in reaching affected persons or populations: These can be community volunteers, community leaders, faith-based organizations. Also identify the appropriate time to engage and orient them.

Identify perceptions in the community that might affect communications in an outbreak situation: Engage in a dialogue and understand how the local authorities, affected people and community leaders perceived the current situation. Listen to the concern and fears of the community. Consider the language, culture and socio-economic factors in the community in making the messages. Tailor recommendations in plain language that can be easily adhered to by the affected population.

6.3.2 Steps in Developing Effective Messages During Outbreaks:

6.3.2.1. *Start with EMPATHY:* Acknowledge concern and express understanding of the feelings those affected by the illness. Demonstrate care and show your acknowledgement and understanding of their perspective.

6.3.2.2. *Identify and explain the public health threat – the disease:* Provide information about the disease/cause of the event; who is at risk and factors that put a person at risk. Provide advice on actions to be taken to lessen their risk of getting the disease or where to go when a family member shows signs of the illness. Provide facts.

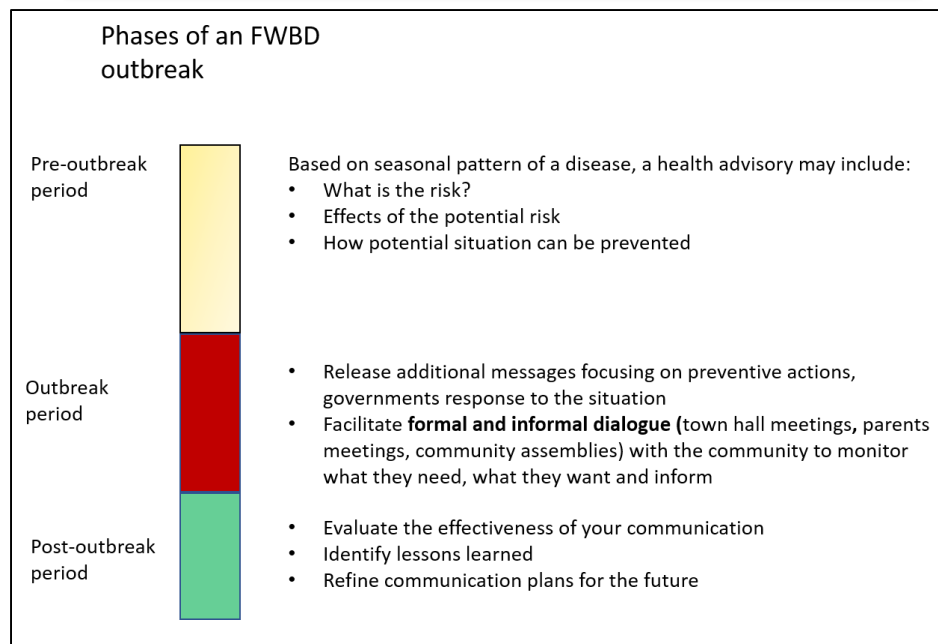
6.3.2.3. *Explain what is currently known and unknown:* Provide details of what specific information is available. Acknowledge if information is not yet available but provide specific timeline for providing updated information.

6.3.2.4 *Explain what health actions are being taken and why:* Describe in brief but clear terms the agencies involve in the response, their roles and actions that are taken.

6.3.2.5. *Emphasize a commitment to the situation:* Provide assurance by mentioning the actions taken by the government for early control of the outbreak.

Risk communication should be incorporated in all aspects of outbreak response and should be part of the health promotion and communication plan. Figure 17 provides the risk communication activities at each phases of an outbreak.

Figure.17 Risk Communication During the Different Phases of an Outbreak

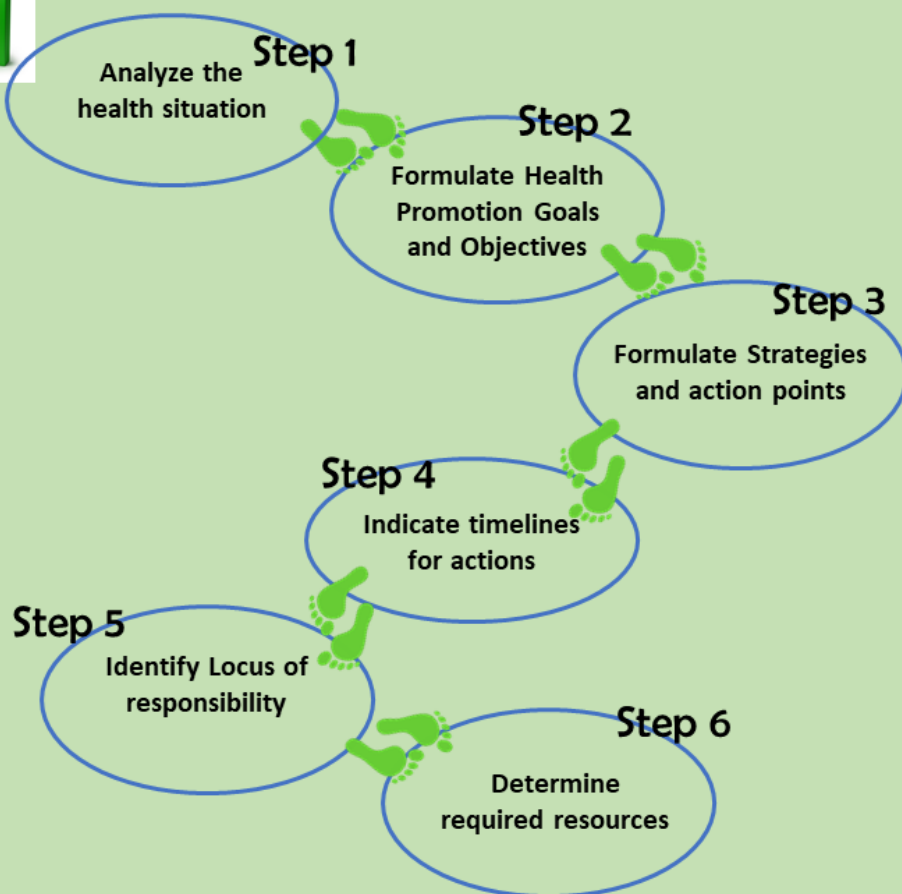


6.4 Communication Plan

A communication plan defines the approach that the program will use to communicate with communities. It helps ensure systematic information sharing and two-way communication. The FWBD-PCP at the national level, in line with the National Strategic Plan 2017-2022 (Objective 2: Strategy2), developed a national health promotion and communication plan. The program encourages the local government unit (provinces) to develop its communication plan that fits its local scenarios, challenges and seasonality of FWBD. The national program will continue to provide educational materials (posters, fliers, flipcharts), health advisories and trainings to the local government units.



Box 8: Steps in developing Communication Plan



6.4.1 Step 1: Analysis of the situation:

The first step in developing your communication plan is assess the existing situation in your locality. You need to:

- ✚ identify who are at risk of FWBD? You can do this by reviewing your data and determine the ages, gender or any specific community commonly affected by FWBD;
- ✚ How they have contracted the diseases?
- ✚ What are they behaviors or practices (hygiene and sanitation)?
- ✚ What services and resources do they need?
- ✚ How people can be reached?



This information can be obtained from reviewing records and reports as well as through interviews, community consultations. To be able to formulate your behavioral objectives, you need to identify the vulnerability and risk in your community.

Vulnerability is about a person not having the power or ability to make choices or to act on them. This can often be because of a person's situation within the community – the social environment. Families in rural communities whose source of drinking water are open deep wells or hand pump that are usually submerged in floods during rainy season are examples of vulnerabilities. Or families with no sanitary toilets and practicing open defecation. **Risk** is an attitude or behavior that put a person at risk of a specific disease such as students buying from street food vendors or not practicing proper handwashing.

Box 9: Activity 1 for Communication Plan Development

1. Start listing any vulnerable groups in your community such as school children, out of school children, IPs, resettlement sites, urban poor communities;
2. List also the existing behavioral factors in your communities that put people at risks for FWBD (poor personal hygiene, open defecation, rampant small-scale food vendors -street foods);
3. List of existing environmental factors such as:
 - Type of drinking water source in the community (point source, communal faucet system, waterworks system);
 - Presence of small-scale food vendors/markets

6.4.2 Step 2: Formulate Health Promotion Goals and Objectives:

Goals and objectives are the desired changes to be achieved within a given time period through the use of different strategies and resources. Defining the objectives will make your communication plan focused.

6.4.2.1 Identifying and analyzing your target audience

With your situational analysis, identify your target audience. An **audience** is the group of people you are trying to reach with your communication plan. Breaking down all possible target audience and the existing risks and opportunities may help you define a more concrete communication objective. There are two types of target audience: a) **Primary** are people you would like to reach and change their attitudes and behaviors; b) **secondary** are people who may/can influence the primary audience. Activity 2 may guide you on how to do this.

Box 10: Activity 2 for Communication Plan Development

Fill-up this table, list as many possible target audience in your community.

Target Audience	Risks/Barriers	Opportunities
Primary		
Children		
Mothers		
IP communities		
Families		
Policy makers		
Secondary		
Mothers		
Religious figures		
Community leaders		
Teachers		
Health workers		
Community outreach workers		
Health Educators		

You may need to gather more information about your audience to identify the barriers and opportunities. You can gather this information by interviewing health workers (who know the profile of the community); visiting and interviewing teachers and school administrators;

Interviewing community leaders; and conducting focus group discussions. Sometimes you may need to segregate your target audience (Children: school children and out of school children; mothers: working mothers and housewife). This information may also influence your strategy,

Secondary audience is important because they provide support and influence to the primary audience. They are sometimes called “gatekeepers” of primary audience as they provide leadership, shape opinions and impact on access to services and resources. (Pacific BCC Manual).

the message and the medium for your message.

6.4.2.2 Deciding which behavior you want to change

Continuing from your listing your different target audience, their risk/barriers and opportunities. You can then identify the priority target audience and what behavior of your target group you need to change. It is important to keep in my mind that it is better to focus on a few audience than trying to address all as it may be difficult for you to track it later.

Your communication plan should align with the goal of the national program – reducing the morbidity and mortality due to food and water-borne diseases. However, your communication plan objective should address the problem you have identified in your situational analysis. Achieving your objective will then lead in reducing cases and death due to food and water-borne diseases in your locality.

All objectives should be able to answer the following questions:

Who? Who are the people you are trying to reach in your communication plan?

What? What is the action (change in knowledge, attitude, behavior or environment) that needs to happen?

When? What is the time frame?

Where? Where will you be distributing or using your messages or implementing your activities?

Box 11: Important features of communication objectives

Make sure your objective is **SMART**:

Specific: Specific audience and location are clearly stated

Measurable: Will you be able to measure the change you are expecting to happen?
And how will you be measuring it?

Appropriate: Are your objectives relevant to the program goals? Can the issue or problem actually be addressed by communication?

Realistic: Is it possible to achieve your objective? Can you actually reach your target audience? Do you have enough manpower and funding to reach the number of people within the given timeline?

Timebound: For how long do you expect to implement your plan? Is this period of time realistic to achieve your objectives?

Source: Pacific BCC Manual

6.4.3 Step 3: Formulate Strategies and Action points

A strategy is a broad approach to achieve behavioral objectives. Under each strategy are specific activities to be implemented. Your strategy should be directed to both your primary and secondary audience. It is encouraged that your strategy should include one or more of these areas:

- a) **Building Healthy Public Policy:** are intended for local government officials (policy makers). It may require advocacy strategy and activity that will lead to the development and issuance of policy instruments (local issuances, ordinances, administrative order, memorandum of agreement) that will support implementation of preventive measures for food and water-borne diseases.
- b) **Creating a supportive environment:** can be both physical (making services more accessible) or organizational (creation of networks, inter-agency committees and alliances to multiply the number of people promoting particular health actions. Your audience needs to be linked with products and services that will reinforce their change in behavior and practices.

- c) **Strengthening community actions:** Involving the community in setting priorities, making decisions, planning strategies and implementing them provides the feeling of ownership rather than feeling things are being forced on them. Tapping mother's group or parent-teacher association as venues for promotional campaigns for prevention and control of food and water-borne diseases or channels for communication messages.
- d) **Developing personal skills:** providing information and education to enhance people's life skills and improve on personal hygiene practices using various channels (schools, community) and tapping different information providers (teachers, community leaders). People need to be taught and be given opportunities to practice a healthier behavior. It can be in a form of formal training, coaching, actual demonstration, peer education, drama or puppetry.

6.4.4 Step 4: Indicate timelines for actions

Indicate timelines for each action which can be expressed in weeks, months or quarter. An estimated timeline is important in tracking and evaluating your plan.

6.4.5 Step 5: Identify locus of responsibility

The locus of responsibility is the individual directly responsible for the completion of the planned activity or action points. It is the accountable/responsible person that specific action points are accomplished. It is important that the lead person will be specified rather than the office or agency. This is again important in tracking the status of implementation of the plan.

6.4.6 Step 6: Determine the required resources

Your planned activities require resources. Determine the resources in your organization and identify those that can be utilize or can be tapped for your planned activities. You can also tap external resources such as the regional and national health office, other government, private organizations, non-government agencies or community-based organization in your locality. Thus, it is advisable that these groups have already been involved in the early stage of developing your communication plan.

Annex T is the FWBD communication plan at the national level. This may serve as a guide for you in developing your local communication plan.

6.5 Other Advocacy materials

In public health, we need to advocate either to the local decision-makers for support in resources or the issuance of local policy or ordinances that will strengthen the implementation of the program. We may also advocate to other funding institutions or community leaders. Most of the time, we advocate by meeting with these people of influence. However, it will be helpful if we have materials that can help bring our message to the table and influence decision makers.

6.5.1 Public Health Advisory

The Department of Health issues health advisory in the form of Department Circular (Annex U). The message of the advisory is directed to regional offices and DOH retained hospitals. The advisory is released at the start of the rainy season and reminds the reader that the presence of rainy season can pose a significant risk to health because of possibility of increase in diarrhea specially cholera. It also contains information on protective behavior such as boiling of water and preparatory actions for hospitals to prepare in managing and treating patients.

At the local government unit may also release and disseminate similar public health advisory. Messages may be tailored to specifically fit the target audience. It can be written in the vernacular language of the community. It can be released to the government offices or the community through community bulletin boards.

Public health advisory is a statement containing the presence of a significant health risk and recommending measures to be taken to decrease exposure and eliminate or substantially mitigate the risk to human health

[Medical dictionary](#)

When do you release public health advisory?

Public health advisory can be released before the expected rise of cases following the seasonal pattern of the disease (food and water-borne diseases may rise during the rainy season (because of flood and contamination of water sources) or summer (because the high humidity and temperature provides a conducive environment for the growth of pathogen). During disease outbreak, public health advisory may be released for the following reasons:

- ✚ To warn the community of the existence of the outbreak;
- ✚ Inform the public of preventive measures being done to control the outbreak;
- ✚ Advise the community of protective behavior to prevent them from getting the illness

6.5.2 Program Briefer

Program briefer is a one to two pages document that contains a background, objective of the program and current status. The document should also include some important data that will support your message. A briefer will provide the over-all picture and problem at a glance. Most Local Chief Executive have a full schedule with limited time to read long reports. Briefer can be given at the same time you give verbal presentation during meetings. Using infographics and pictures to drive your message will make your document more visual and easier to comprehend.

6.5.3. Program Reports

Program reports can be given to Local Chief Executive or Administrator. Program reports contain more details of the accomplishments, problems encountered and recommendations. Providing data to support your report is vital in influencing decision makers. Distributing reports on a regular basis can be a tool to influence decision makers. They have at hand the current status of the program which can be used during management meetings and decision making.

6.5.4 Short videos

Videos documenting a good practice or current problems may also be an effective advocacy material. International NGOs and other funding agencies appreciate good practice stories as it relays empowerment of the community and actual experience. Videos also show actual environment set-up and provide a good visualization of the problem.



Section VII: Other Programmatic Functions

Under this section are other programmatic functions such:

- Policy Development
 - Capacity Building
 - Monitoring and Evaluation, Research
-

7.0 Other Programmatic Functions

7.1 Policy Development

6.1.1 The FWBD-PCP will review all policies developed in the past in relation to FWBD. The FWBD Program Manager will revise, update or develop new policies and guidelines as needed by the program in achieving the objectives and targets of the Strategic Plan for FWBD-PCP.

6.1.2 The FWBD-PCP ensures dissemination/orientation of new policies are conducted to the different health facilities.

7.2 Capacity Building

6.2.1 The FWBD-PCP and collaborating DOH agencies will develop the training guidelines and modules to enhance the skills of the field implementors (Health facility staff) in providing quality services.

6.2.2 A training team (regional and national staff) will be capacitated to conduct the roll-out of trainings at the regional/provincial level.

6.2.3 All trainings need assessment should be conducted to determine the training needs of health staff in providing quality services.

6.2.4 The FWBD-PCP, through the TWG, will consolidate all training schedule (for related FWBD trainings) from different collaborating partners.

7.3 Monitoring and Evaluation, Research

6.3.1 National program implementation review (PIR) will be conducted annually. Regional FWBD coordinator may conduct a semi-annual PIR for their provinces.

6.3.2 A mid-evaluation of the National Strategic Plan 2019-2023 will be conducted by a team of external evaluators.

6.3.3 Details of program indicators, reporting and supervisory guidelines is discussed in detail in the FWBD Monitoring and Evaluation Plan

References:

Abbigail J., Tumpy D. and Glen N.; Communicating During an Outbreak or Public Health Investigation; Field Epidemiology Manual, CDC

Advocacy Reference Manual, Asia Pacific Executive Matrix

Burden of Food-borne Diseases in the South East Asia Region, WHO Regional Office for SEA; 2016

Creating an effective Communication Project in the Pacific Region for HIV/STI and Other Sexual and Reproductive Health Projects, Secretariat of the Pacific Community 2008

Communicable Disease Epidemiologic Profile, WHO, Geneva, Switzerland 2009

2017 Food and Water-borne Diseases; Morbidity Week (MW1-MW48); Epidemiology Bureau

Gaya Ganhewage, An Introduction to Risk Communication, 2014

Georg Kaperrud, Outbreak of Food and Water-borne Diseases: Guidelines for Investigation and response, September 2018.

Guidance on the regulations for the Transport of Infectious Substance 2017-2018. Geneva Switzerland; WHO, 2017 Lic. CC-BY-NC-SA 3.0 IGO

Guidelines for Specimen Collection, Transport, and Referral for Infectious Disease Outbreak Response, Manual for Clinical Specimen. RITM 2013

Guidelines for the Collection of Clinical Specimen During Field Investigation of Outbreaks, WHO, Department of Communicable Disease Surveillance and Response

Health Promotion, National Malaria Program: Manual of Operation, Department of Health, Philippines

Managing Epidemics: Key facts about major deadly diseases, Geneva: WHO 2018, CC BY-NC-SA 3.0 IGO

Manual of Procedures for the Philippine Integrated Disease Surveillance and Response; Epidemiology Bureau, Department of Health 2007.

Manual of Procedures For The Surveillance, Outbreak Investigation and Response to Microbial Agents of Food and Water-borne Diseases, Research Institute of Tropical Medicine, Department of Health; 2007

National Strategic Plan 2017-2020, Food and Water-borne Disease Program

Philippine National Standards for Drinking Water, Department of Health

Philippine National *Aedes*-borne Viral Diseases Prevention and Control Program, Manual of Procedures, Volume 5: Health Promotion

Strengthening Surveillance of and Response to Food-borne Diseases: A Practical Manual. Introductory Module. Geneva: World Health Organization; 2017 Lic.CC BY-NC-SA 3.0 ICD

Strengthening Surveillance of and Response to Foodborne Diseases: A Practical Manual. Strengthening Indicator-Based Surveillance Module. Geneva: World Health Organization; 2017 Lic.CC BY-NC-SA 3.0 ICD

Strengthening Surveillance of and Response to Foodborne Diseases: A Practical Manual. Investigating Foodborne Disease Outbreak Module. Geneva: World Health Organization; 2017 Lic.CC BY-NC-SA 3.0 ICD

WHO Estimates of the Global Burden of Food-borne Diseases, WHO 2015.

WHO Fact Sheets For Cholera, Hepatitis A, Typhoid Fever and Rotavirus

<https://www.ruralhealthinfo.org/toolkits/health-promotion>

<https://www.washinhcf.org>, Module 8: Behavior Change Communication- WASH

Annexes

Annex A: Policies and Guidelines For the National Control of Diarrheal Diseases



Republic of the Philippines
Department of Health
OFFICE OF THE SECRETARY

SAN LAZARO COMPOUND
RIZAL AVENUE, 25A, 5TH FLOOR
MANILA, PHILIPPINES
TEL. NO. 771-48-88

November 3, 1993

DEPARTMENT CIRCULAR

No. 177 s. 1993

TO : ALL SERVICE CHIEFS, REGIONAL FIELD OFFICE DIRECTORS,
PROVINCIAL DIRECTORS, PROVINCIAL AND CITY HEALTH
OFFICERS, CHIEF OF HOSPITALS, MUNICIPAL HEALTH
OFFICERS, RURAL HEALTH PERSONNEL AND OTHERS
CONCERNED.

SUBJECT : POLICIES AND GUIDELINES FOR THE NATIONAL CONTROL
OF DIARRHEAL DISEASES (CDD) PROGRAM

As part of our organized effort to ensure effective prevention and control of diarrheal diseases as well as to strive for sustainability of the Philippine Control for Diarrheal Diseases Program, you are hereby enjoined to observe the following policies and guidelines:

I. National policy on home case management

1. Give the child more fluids than usual to prevent dehydration

Start giving extra fluids as soon as diarrhea starts.
Give the following fluids in addition to water:

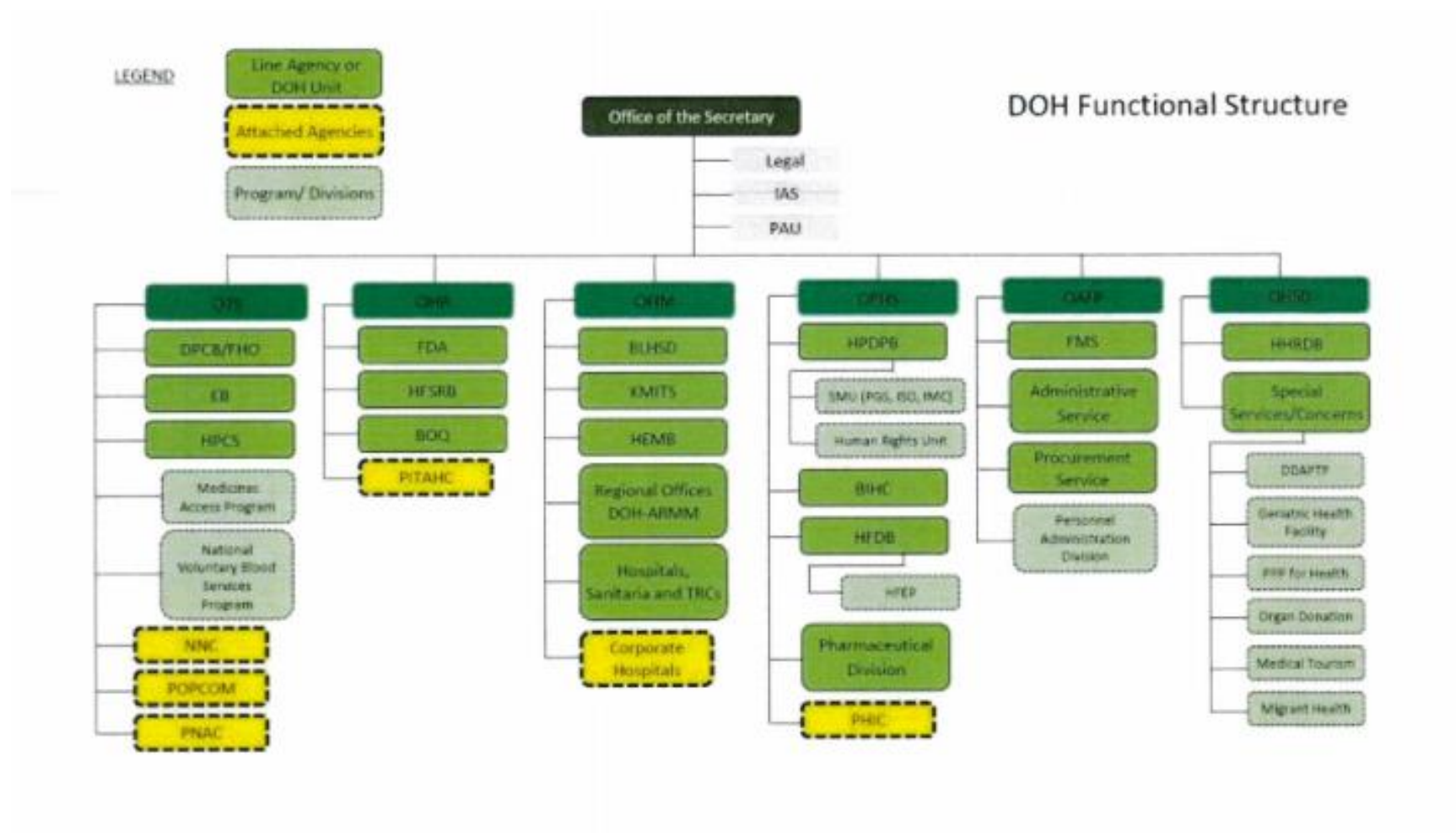
Fluids, with or without salt, such as rice water ("am"), home made
broth/soups, coconut water or ORS solution.

Do not give softdrinks, commercial or sweetened fruit drinks,
sweetened teas, or coffee.

Continue to give extra fluid until diarrhea stops.

Infants below 6 months of age who are exclusively breastfed
should continue breastfeeding and be given ORS. If ORS is not
available, give plain clean water. Other fluids should not be given.

Annex B: DOH Organizational Structure of Disease Prevention and Control Bureau



Annex C: Findings of the Assessment

Strategy 1. <i>Regulate and monitor food and water sanitation practices at the local level through enforcement of national and local legislations, application of appropriate technical standards and participation of non-government agencies.</i>	
Implementation Status	<p>There is a robust set of laws and policies that support food and water sanitation practices in the country.</p> <ul style="list-style-type: none"> • 2012. RA 10611 on Food Safety Act to strengthen the food safety regulatory system in the country to protect consumer health and facilitate market access of local foods and food product • 2000 RA Act 9003. providing for an ecological solid waste management program, creating the necessary institutional mechanisms and incentives declaring certain acts prohibited and providing penalties, appropriating funds therefore and for other purpose • 1975 PD No. 856 Code of Sanitation of the Philippines <ul style="list-style-type: none"> ○ <i>Due to the absence of data (full scale policy review) relative to the implementation of the above policies, the extent of compliance and adherence to these laws and policies cannot be fully ascertained.</i>
Strategy 2. <i>Sustain inter-agency collaboration to fast-track sanitation infrastructure development in poor urban areas and in rural areas with low access to safe water and sanitation facilities.</i>	
Implementation Status	Established Interagency Committee on Environmental Health with sub-task forces on Water, Solid Waste, Toxic Chemicals and Occupational Health
Strategy 3. <i>Promote personal hygiene, food and water sanitation practices and the principles of environmental health.</i>	
Implementation Status	<ul style="list-style-type: none"> • 90% of HHs have access to safe water (2015) • 86.7% of HHs with sanitary toilets (2015) • No data available to establish extent of personal hygiene practices
Strategy 4. <i>Promote the use of ORS in the management of diarrhea to prevent dehydration, especially among infants and children.</i>	
Implementation Status	<p>ORS continues to be the primary intervention of children with diarrhea as shown by the 2015 FHSIS Reports that 100% of diarrhea cases were given ORS.</p> <ul style="list-style-type: none"> • However, facilities visited are already without ORT Corners • Likewise, some health facilities have inadequate supply of zinc

Strategy 5. <i>Promote breastfeeding and other good feeding practices for infants and children.</i>	
Implementation Status	The 2013 NDHS showed that bottle-feeding is relatively still common in the Philippines with 27% of infants under age two months being fed using a bottle with a nipple.
Strategy 6. <i>Continue training of health personnel in the early diagnosis and treatment of food-borne and water-borne diseases.</i>	
Implementation Status	No training has been conducted on the early diagnosis and treatment of FWBDs; the clinic practice guidelines are still currently being finalized which will be packaged into a Training Module for both hospital and public health facility staff
Strategy 7. <i>Continue nationwide information campaign for the prevention and control of food-borne and water-borne diseases.</i>	
Implementation Status	<ul style="list-style-type: none"> No nationwide information campaign has been designed and mounted on the prevention and control of FWBDs in the past 6 years

Annex D: DPO on the Creation of Technical Working Group, Expert Panel and Steering Committee For the FWBD-PCP



Republic of the Philippines
Department of Health
OFFICE OF THE SECRETARY

November 3, 2017

DEPARTMENT PERSONNEL ORDER

No. 2017 - 5422

SUBJECT: Creation of the Technical Working Group, Expert Panel and Steering Committee for the Food and Waterborne Disease Prevention and Control Program

I. RATIONALE

Food and waterborne diseases (FWBD) are among the most common cause of diarrhea which remain one of the ten leading causes of morbidity and mortality in the country. Also, outbreaks from FWBD can be very massive and catastrophic. Since most of these diseases have no specific treatment modalities, the best approach to limit economic losses due to FWBD is prevention through health education and strict food and water sanitation.

In 1997, the Department of Health (DOH) issued AO No. 29-A s. 1997 "Creation of the Food and Waterborne Diseases Prevention and Control Program" which defines the roles and responsibilities of different agencies to ensure prevention and control of Food and Waterborne Diseases.

The goal of Food and Water-borne Diseases Prevention and Control Program is to reduce the morbidity rate and eliminate deaths due to diarrhea. The program also aims to reduce the number of all typhoid, paratyphoid, and cholera outbreaks to one per year. Since the occurrence of food and water-borne diseases is essentially related to economic and socio-cultural factors, the program recognizes that outbreaks will persist unless underlying social ills are corrected. Along with poverty comes the prevalence of infectious diseases. However, if specific interventions are employed, a drastic reduction of bacterial and parasitic infections can also be expected.

Pursuant to the DOH commitment in achieving the Philippine Health Agenda for the outbreak of FWBD, Steering Committee, Food and Waterborne Disease Prevention and Control Program (FWBDPCP) Management Group, Technical Working Group and Expert Panel shall be created.

II. OBJECTIVE

To create functional groups that shall operationalize and support the Food and Waterborne Disease Prevention and Control Program initiatives.

III. ORGANIZATION

Functional Groups	Composition
A. Steering Committee	Chairperson: Lyndon Lee S. Suy, MD, MPH Assistant Secretary of Health Vice-Chair: Dr. Winston Go (Government) Director, San Lazaro Hospital (SLH)

Building 1, San Lazaro Compound, Rind Avenue, Sta. Cruz, 1003 Manila • Trunk Line 654-7800 local 1113, 1108, 1133
Direct Line: 711-4902; 711-9503 Fax: 743-1829 • URL: <http://www.doh.gov.ph>; e-mail: officeofsecretary@doh.gov.ph

	<p>Vice-Chair: Dr. Mari Rose Delos Reyes (Private) President, Philippine Society for Microbiology and Infectious Diseases (PSMID)</p> <p>Members: <u>Government</u></p> <ol style="list-style-type: none"> 1. Dr. Mario S. Baquilod, OIC-Director IV, Disease Prevention and Control Bureau (DPCB) 1. Ma. Rosa Gonzales, Health Policy Division Chief, Health Policy Development and Planning Bureau (HPDPB) 2. Dr. Jose Benito Villarama, Chief of Clinics (COC), SLH, DOH <p><u>Private</u></p> <ol style="list-style-type: none"> 1. Dr. Vegliore Maguinsay, Board of Director, PSMID 2. Dr. Ma. Liza Antoinette Gonzales, President, Podiatric Infectious Disease Society of the Philippines (PIDSP) 3. Dr. Eva Irene Yu-Maglionzo, President, Philippine Academy of Family Physicians (PAFP) <p><u>Developmental Partner</u></p> <ol style="list-style-type: none"> 1. Engr. Bonifacio Magtibay, Technical Officer, World Health Organization (WHO)
B. Food and Waterborne Disease Prevention and Control Program (FWBDPCP) Management Group	<p>Disease Prevention and Control Bureau</p> <p>Advisers: Dr. Mario S. Baquilod, OIC-Director IV, DPCB Dr. Leda Hernandez, OIC-Director III, DPCB Dr. Rosalind G. Vianzon, Division Chief, Infectious Disease Prevention and Control Division (IDPCD), DPCB</p> <p>Members:</p> <ol style="list-style-type: none"> 1. Dr. Theodora Cecile Magturo, FWBDPC Program Manager 2. Technical Staff, IDPCD 3. Technical Staff, IDPCD
C. Technical Working Group (TWG)	<p>Chairperson: Dr. Theodora Cecile Magturo Food and Waterborne Disease Program Manager, IDPCD</p> <p>Vice-Chair: Dr. Alethea De Guzman Medical Specialist IV, Epidemiology Bureau (EB)</p> <p>Members: <u>DOH Central Office</u></p> <ol style="list-style-type: none"> 1. Ms. Evelyn Perez, Health Promotion and Communication Services (HPCS) 2. Ms. Dulce Elfa, Family Health Office (FHO) 3. Dr. Lester Tan, Bureau of Local Health Systems and Development (BLHD)

	<ol style="list-style-type: none"> 4. Dr. Anthony Cu, Health Facility Development Bureau (HFDB) 5. Dr. Ronald Law, Health Emergency and Management Bureau (HEMB) (Preparedness) 6. Engr. Luis Cruz, ERDD 7. Dr. Winston Palasi, Infectious Disease for Elimination Division (IDED), DPCB <p><u>DOH Regional Office</u></p> <ol style="list-style-type: none"> 1. Dr. Rommel Lizan, FWBD Coordinator (Region IV B) 2. Dr. Dana Nicole Dela Cuesta, FWBD Coordinator National Capital Region (NCR) <p><u>Other DOH Offices</u></p> <ol style="list-style-type: none"> 1. Ms. Rowena Capistrano, Surveillance Officer, Research Institute for Tropical Medicine (RITM), Surveillance and Response Unit (SRU) 2. Ms. Jennifer Luchavez, Chief Science Research Specialist (SRS), RITM, Department of Parasitology 3. Dr. Nimfa Putong, Public Health Office (PHO) Head, SLH, PHO <p><u>Other Government Agencies</u></p> <ol style="list-style-type: none"> 1. Ms. Lydia Leonardo, Chair of Parasitology Dept., University of the Philippines, College of Public Health (UP-CPH) 2. Representative, Department of Agriculture (DA), Bureau of Animal Industry (BAI), Bureau of Fisheries and Aquatic Resources (BFAR) 3. Representative – NCR, Local Government Unit (LGU) <p><u>Medical Societies / International Organizations</u></p> <ol style="list-style-type: none"> 1. Representative – PSMID 2. Representative – PIDSP
D. Expert Panel	<p><u>Core Panel:</u></p> <ol style="list-style-type: none"> 1. Dr. Mario Baquilod, OIC-Director IV, DPCB 2. Dr. Socorro Lupisan, Director IV, RITM 3. Dr. Vicente Belizario / Representative, UP-CPH 4. Chairperson / President / Representative, PSMID 5. Chairperson / President / Representative, PIDSP 6. Chairperson / President / Representative, Philippine Society for Pediatric Gastroenterology, Hepatology and Nutrition (PSPGHAN) 7. Technical Officer, WHO, Country Office <p><u>Support Experts:</u></p> <ol style="list-style-type: none"> 1. Dr. Gloria Balboa, Director IV, HEMB 2. Dr. Irma Asuncion, Director IV, EB 3. Chairperson / President / Representative, UP, National Poison Management and Control Center (NPMCC) 4. Chairperson / President / Representative, PAFP

IV. FUNCTIONS

A. STEERING COMMITTEE

1. Serves as the national oversight on the FWBDPCP;
2. Recommends for approval to the Secretary of Health the final technical outputs of the TWG and Expert Panel Group.

B. FWBDPCP MANAGEMENT GROUP

Lead team to plan, manage activities, document and network with other DOH Bureaus and other partners in order to produce the following:

1. Logical Framework for FWBD Program
2. FWBD Program Strategic Plan for 2017-2022
3. Administrative Order – National Policy on Mandate of the National FWBD Program
4. Procurements; Allocation Lists of FWBD commodities
5. Guideline and Policy Formulations
6. Manual of Procedures on FWBD Program
7. Budget / Work and Financial Plan; Sub Allotment Guidelines
8. Networking and Collaboration with partners/ stakeholders

C. TECHNICAL WORKING GROUP

1. Recommend for review and approval to the Expert Panel the FWBD Strategic Plan and its implementation.
2. Review, update and formulate policies and guidelines for the prevention and control of FWBD.
3. Provide technical assistance to key health sectors, participating the Regional Health offices for better program management of FWBD strategies/activities.
4. Coordinate with DILG, in partnership with the ECHO-DPCB and FDA on food safety regulations.
5. Adopt appropriate advocacy strategies in consultation and partnership with the HPCS.
6. Identify and recommend research agenda related to FWBD.

D. EXPERT PANEL

1. Reviews policy issuances and strategies of the DOH-FWBOPCP;
2. Provides evidence-based policy and programmatic recommendations for the program;
3. Reviews final technical products to include plans and provide recommendations for approval to the Secretary of Health.
4. Participate during technical discussions, deliberations as deemed necessary by the TWG.

V. FREQUENCY OF MEETINGS

The Technical Working group shall meet once a month or as deemed necessary by the body. The Expert Panel shall meet quarterly or as deemed necessary by the body. The Steering Committee shall meet as deemed necessary by the body.

VI. OPERATIONAL SUPPORT

Under this Order, all expenses incurred during the conduct of FWBDPCP management group, TWG, Expert Panel and Steering Committee activities shall be charged against the fund of **Other Infectious Diseases** budget line item subject to usual accounting and auditing rules and regulations.

VII. EFFECTIVITY

This Order shall take effect immediately.

By Authority of the Secretary of Health:



GERARDO V. BAYUGO MD, MPIL, CESO III
Undersecretary of Health
Office for Technical Services

Annex E: IHR Provision Stating the conditions for Reporting FWBD cases/events

Article 6 Notification

- ✓1. Each State Party shall assess events occurring within its territory by using the decision instrument in Annex 2. Each State Party shall notify WHO, by the most efficient means of communication available, by way of the National IHR Focal Point, and within 24 hours of assessment of public health information, of all events which may constitute a public health emergency of international concern within its territory in accordance with the decision instrument, as well as any health measure implemented in response to those events. If the notification received by WHO involves the competency of the International Atomic Energy Agency (IAEA), WHO shall immediately notify the IAEA.
2. Following a notification, a State Party shall continue to communicate to WHO timely, accurate and sufficiently detailed public health information available to it on the notified event, where possible including case definitions, laboratory results, source and type of the risk, number of cases and deaths, conditions affecting the spread of the disease and the health measures employed; and report, when necessary, the difficulties faced and support needed in responding to the potential public health emergency of international concern.

✓*Article 7 Information-sharing during unexpected or unusual public health events*

If a State Party has evidence of an unexpected or unusual public health event within its territory, irrespective of origin or source, which may constitute a public health emergency of international concern, it shall provide to WHO all relevant public health information. In such a case, the provisions of Article 6 shall apply in full.

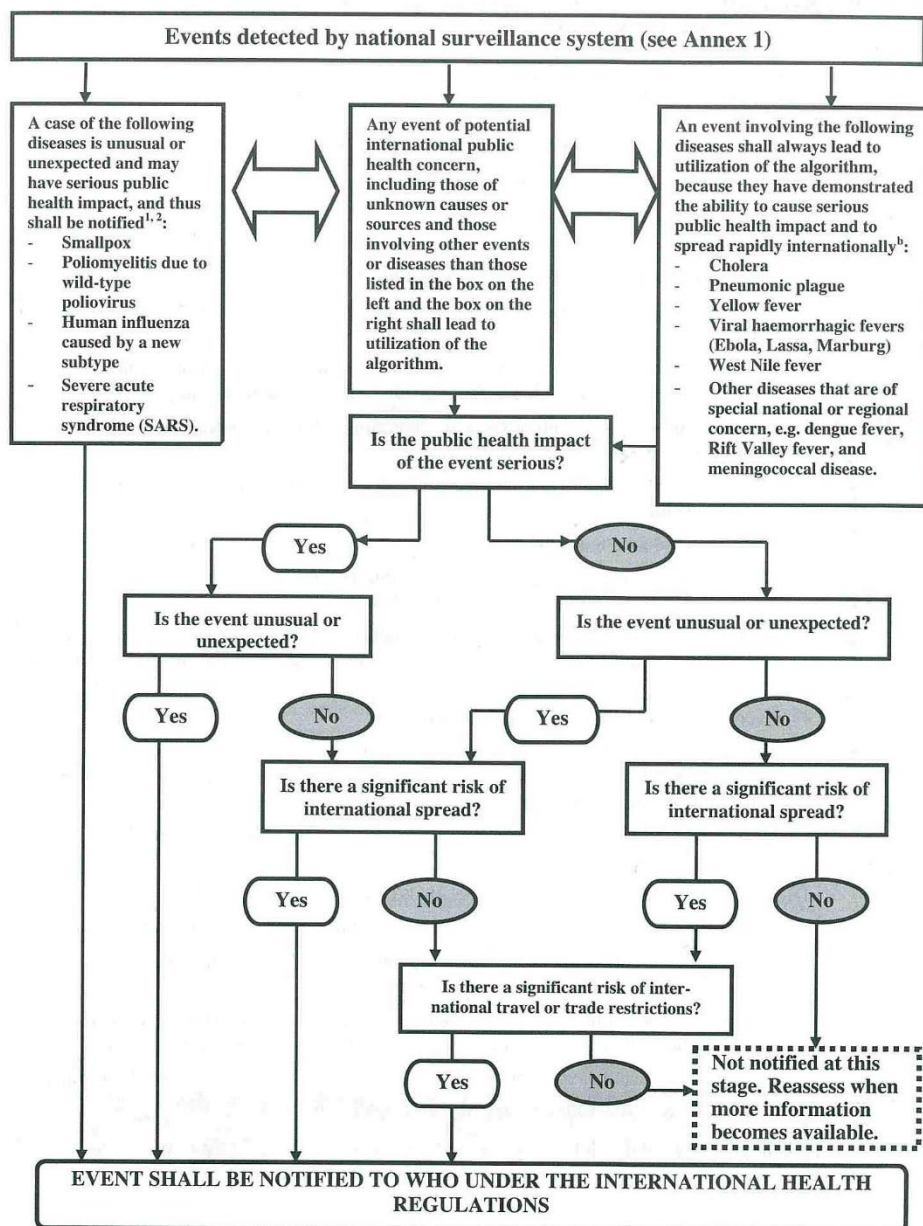
Article 8 Consultation

In the case of events occurring within its territory not requiring notification as provided in Article 6, in particular those events for which there is insufficient information available to complete the decision instrument, a State Party may nevertheless keep WHO advised thereof through the National IHR Focal Point and consult with WHO on appropriate health measures. Such communications shall be treated in accordance with paragraphs 2 to 4 of Article 11. The State Party in whose territory the event has occurred may request WHO assistance to assess any epidemiological evidence obtained by that State Party.

Article 9 Other reports

1. WHO may take into account reports from sources other than notifications or consultations and shall assess these reports according to established epidemiological principles and then communicate information on the event to the State Party in whose territory the event is allegedly occurring. Before taking any action based on such reports, WHO shall consult with and attempt to obtain verification from the State Party in whose territory the event is allegedly occurring in accordance with the procedure set forth in Article 10. To this end, WHO shall make the information received available to the States Parties and only where it is duly justified may WHO maintain the confidentiality of the source. This information will be used in accordance with the procedure set forth in Article 11.
- ✓2. States Parties shall, as far as practicable, inform WHO within 24 hours of receipt of evidence of a public health risk identified outside their territory that may cause international disease spread, as manifested by exported or imported:
 - (a) human cases;
 - (b) vectors which carry infection or contamination; or
 - (c) goods that are contaminated.

ANNEX 2
 ✓ **DECISION INSTRUMENT FOR THE ASSESSMENT AND NOTIFICATION
 OF EVENTS THAT MAY CONSTITUTE A PUBLIC HEALTH EMERGENCY
 OF INTERNATIONAL CONCERN**



¹ As per WHO case definitions.

² The disease list shall be used only for the purposes of these Regulations.

Annex F: Guidelines on Rotavirus and cholera vaccination



Republic of the Philippines
Department of Health
OFFICE OF THE SECRETARY

July 28, 2017

DEPARTMENT MEMORANDUM
No. 2017 - 0353

FOR : ALL UNDERSECRETARIES, ASSISTANT SECRETARIES, DIRECTORS OF BUREAUS, DOH REGIONAL OFFICES, SPECIALTY HOSPITALS, CHIEFS OF MEDICAL CENTERS AND HOSPITALS, AND OTHERS CONCERNED

SUBJECT : Guideline in the Administration of Oral Cholera Vaccine in Evacuation Centers for the Displaced Population and Health Care Providers Following Humanitarian Crisis

I. RATIONALE

Cholera is an acute watery diarrheal disease caused by toxigenic strains of the bacterium *Vibrio cholera*. The disease is characterized by acute onset of voluminous watery diarrhea leading to rapid dehydration. If not promptly treated with fluid replacement and antibiotics, the disease can be fatal in a matter of hours. Cholera is transmitted through the fecal-oral route and primarily occurs in areas with poor access to safe drinking water and inadequate sanitation infrastructure. It remains an important, preventable but neglected public health problem, affecting mostly the poor, including displaced population as a result of humanitarian emergencies. Spread of cholera among internally displaced persons staying in evacuation centers is faster than among families staying in their own houses. The provision of safe drinking water, adequate sanitation, hygiene promotion and robust disease surveillance remain the mainstays of preventing both endemic and epidemic cholera. Cholera vaccination is a key option for cholera prevention and control, and appropriate and targeted use of cholera vaccines is recognized as a useful complement to improving water, sanitation, and hygiene measures within a comprehensive cholera control strategy.

Cholera vaccination is an important short- to medium-term strategy for cholera prevention and control in crisis settings. In 2010, the World Health Organization (WHO) recommended that oral cholera vaccines (OCVs) should be considered in preemptive situations (prevention before an outbreak starts) as part of comprehensive cholera control plans, and could be considered in reactive situations (once an outbreak starts) depending on the local epidemiology and feasibility of conducting vaccination. Furthermore, the recommendation emphasized the need to sustain critical cholera control interventions in outbreak situations.

II. SCOPE AND COVERAGE

This Department Memorandum shall guide all immunization program managers and immunization partners involved in the immunization of Oral Cholera Vaccine.

III. GUIDELINES

A. Target

1. All children aged 1 – 10 years in evacuation centers;
2. Health workers providing health services in evacuation centers; and
3. health facility staff directly involved in the care of patients with cholera.

B. Preparatory Activities

1. Social Preparation

1.1 Plan for social mobilization

The target population should be informed of the vaccination with oral cholera vaccine at least a week prior to the vaccination.

1.2 Develop key messages

The following messages shall include:

- *What is Cholera?*
 - Is transmitted through contaminated water or food.
 - If not treated, it can cause death from dehydration (or loss of water and salts from the body) within hours
- *How does Cholera spread?*
 - Cholera spreads very easily if hygiene is not good.
 - Cholera spreads when feces from infected persons gets into the water where people drink or the food they eat
- *How to prevent?*
 - Drink and use safe water. Safe water is water that is bottled with unbroken seals, has been boiled or has been treated with chlorine products
 - Wash your hands often with soap and safe water (e.g. after using the toilet, before eating or cooking, after eating or after cleaning baby's feces)
 - Wash food with safe water, cook it well and keep it covered
 - Use latrines. Do not defecate in any body of water
 - Keep latrines clean
 - Get vaccinated with oral cholera vaccine
- *What is cholera vaccine?*
 - It is a vaccine that can protect persons from getting sick from cholera that causes diarrhea.
 - It does not protect against other types of diarrhea.
 - Two doses are required. The vaccine is only effective after the second dose. Taking 1 dose is not enough.

- The 2 doses are taken 2 weeks apart.
- *Good hygiene remains very important. People still need to treat the water, practice good sanitation and get treatment if they are sick.*

2. Masterlisting

Master listing of all eligible individuals in the identified evacuation centers shall be done by health workers using the Recording Form 1 (Masterlist for Eligible Targets). It is important that this master list be kept since the vaccine requires two doses for protection.

C. Administration of Oral Cholera Vaccine

1. Oral Cholera Vaccine

Oral Cholera vaccine is a killed bivalent whole cell vaccine. (O1 and O139serogroups). The vaccine vial contains 1.5 ml suspension in a single dose preparation. The vaccine is prequalified by the World Health Organization (WHO).



Figure 1. Oral Cholera Vaccine

2. Administration

All eligible targets shall receive 1.5 ml of cholera vaccine via oral route.

Note: The cholera vaccine is an oral vaccine and there is no need to use syringes or needles.

Administration of OCV:

- Shake the vaccine vial prior to opening.
- The vaccine is in a 1.5 ml vial. Uncap the plastic seal then remove the aluminum. To avoid injury to the vaccinators, forceps shall be used to remove the aluminum seal.
- Remove the vial stopper.
- The vaccine may be drunk directly from the vial.
- Record the dose given in the materlist of all eligible targets. Maintain the materlist for the first and second doses.

- f. Fasting before and after ingestion is not required, therefore it is not necessary to inquire about the vaccinee's last meal.
- g. Sometimes vaccinees may spit the vaccine. Advise the vaccinee to take a deep breath and consider revaccinating after 30 minutes (if vaccine is still available).
- h. After the dose is given, advise vaccinees to wait for 30 minutes for observation, in case adverse events occur.

3. Schedule of Vaccination

The following is the recommended schedule of vaccination with oral cholera vaccine:

Dose 1: At the time of the first visit of the health worker or vaccination team

Dose 2: At least 2 weeks after the first dose

Note: Cholera vaccine is not meant to replace provision for clean water, sanitation and hygiene, the mainstays for cholera control.

4. Contraindication and Precaution

The vaccine is contraindicated among pregnant women and immunocompromised.

5. Storage and Transport

The vaccine has to be stored at 2°C to 8°C. Do not freeze the vaccine. Freezing will affect the effectiveness of the vaccine.

D. Adverse Event Following Immunization (AEFI)

All detected AEFIs, both minor and serious, shall be reported to the BHS or RHU/CHO. The existing DOH guidelines on AEFI surveillance and response (Administrative Order No. 2016-006) shall be used for this purpose.

Almost all reported AEFIs are mild. In a study conducted, there is no significant difference in AEFIs between the vaccine and the placebo groups. Reported AEFIs included diarrhoea, abdominal pain, nausea, vomiting, loss of appetite, fever, headache and general ill feeling.

IV. IMPLEMENTING MECHANISM

For efficient implementation of the OCV vaccination, it is recommended that orientation of health care providers/vaccinators and hospital staff be conducted.

For your guidance and compliance.

By Authority of the Secretary of Health:


GERARDO V. BAYUGO, MD, MPH, CESO III
 Undersecretary of Health
 Office of the Technical Services



Republic of the Philippines
Department of Health
OFFICE OF THE SECRETARY

August 13, 2014

DEPARTMENT MEMORANDUM

No. ~~2014~~ 2012-0157-A

FOR : ALL UNDERSECRETARIES, ASSISTANT SECRETARIES;
DIRECTORS OF BUREAUS, DOH – REGIONAL OFFICES,
INCLUDING DOH-ARMM, SERVICE AND SPECIALTY
HOSPITALS AND CHIEFS OF MEDICAL CENTERS
AND OTHERS CONCERNED

SUBJECT : Amendment to Department Memorandum No. 2012-0157
dated May 31, 2012 entitled "Administration of Rotavirus
Vaccine for Infants"

Department Memorandum No. 2012-0157 dated May 31, 2012 entitled "Administration of Rotavirus Vaccine for Infants" is hereby amended to change the following items:


Page 2, Items	From	To
A. Coverage	All infants from 6 weeks-15 weeks old identified in the NHIS list by the DSWD nationwide. This shall be integrated in the essential vaccination of all infants and children in these priority areas.	All infants from 1 ½ months or 6 weeks old but less than 2 years old in the Bicol Region (Region 5 and CARAGA).
B. Recommended Schedule of Rotavirus Immunization	The first dose of Rotavirus Vaccine shall be administered orally to infants aged 6 weeks up to 15 weeks .	The Rotavirus vaccine should be administered in a 2-dose schedule. The first dose should be administered orally to infants aged 1 ½ months or 6 weeks old preferably at the time with Pentavalent, OPV1, PCV1 schedules and the second dose at least 1 month or 4 weeks interval after the last dose.

		If an eligible infant <u>missed</u> the recommended timing of the rotavirus vaccination stated above, give the first dose at time the eligible child seen and the second dose at least 1 month or 4 weeks interval but not over 2 years old.
C. Preparation and Administration for the Rotavirus Vaccination	Ensure that the infant is 6 weeks to 15 weeks old	Ensure that the infant is 1 ½ months old or 6 weeks old but less than 2 years old.

This amendment replaces certain corresponding items in the previous memorandum issued because of recent development in country field operations particularly the potential of rotavirus vaccination to further reduce morbidity by employing more flexible immunization schedule (WHO, Weekly Epidemiological Record #5.2013 February 2013)

As such, all stipulated under Department Memorandum No. 2012-0157 shall remain in effect.

For strict compliance:


JANETTE LORETO-GARIN, MD, MBA-H
 Undersecretary of Health
 Women, Children and Family Health Cluster

Annex G: Summary of Roles and Responsibilities of Laboratories at Different Levels of Service Capability

PERIPHERAL LABORATORY	QUALIFIED TERTIARY LABORATORY	QUALIFIED REGIONAL LABORATORY	SUB-NATIONAL LABORATORY (SNL)	NATIONAL REFERENCE LABORATORY (NRL)	REGIONAL REFERENCE/GLOBAL SPECIALIZED LABORATORY (RRL/GSL)
<ul style="list-style-type: none"> Laboratories at the level of the referring institution or DRU Collects clinical specimens for testing Performs preliminary routine testing on clinical specimens (if appropriate) Refers clinical specimen to the nearest capable tertiary, regional laboratories or SNL or to the NRL if the tests are only available at the NRL 	<ul style="list-style-type: none"> City or Provincial Laboratories with tertiary level capability (i.e., able to do routine clinical laboratory Microbiologic testing) Collects and receives clinical specimen for testing Performs culture and sensitivity tests for aerobic bacterial outbreak pathogens Performs preliminary tests for pathogens requiring specialized tests (if capable) Refers clinical specimens to Regional laboratories or SNL for confirmatory testing if unable to perform testing or to the NRL if the tests are only available at the NRL Submits positive bacterial isolates to NRLs for confirmatory testing, isolate banking and epidemic strain assessment 	<ul style="list-style-type: none"> Regional Laboratories with tertiary level capability (i.e., able to do routine clinical laboratory Microbiologic testing) Collects and receives clinical specimen for testing Performs culture and sensitivity tests for aerobic bacterial outbreak pathogens Performs preliminary tests for pathogens requiring specialized tests (if available) Refers clinical specimens to NRLs for confirmatory testing if unable to perform testing or if the tests are only available at the NRL 	<ul style="list-style-type: none"> Five (5) designated and capacitated tertiary laboratories which assist RITM during outbreaks in the timely detection and confirmation of emerging/re-emerging infections for which they are qualified and trained Collects and receives clinical specimen for testing Performs Real-time RT-PCR for emerging-re-emerging infections during outbreaks Refers positive, unsubtypeable and negative specimens to NRL for confirmatory testing 	<ul style="list-style-type: none"> Performs laboratory diagnosis for outbreak specimens if there is no capable tertiary or sub-national reference laboratory near the site of outbreak Receives clinical specimens/isolates for testing Performs specialized diagnostic tests (e.g. Anthrax, Atypical bacteria, Leptospirosis, viruses, emerging infections, newly identified pathogens) Provides confirmatory tests to tertiary, regional and sub-national laboratories Provides peripheral/referring laboratories with transport media as well as guidelines on preparation and use of such media Banks positive outbreak isolates nationwide (NRL as central repository of isolates nationwide) 	<ul style="list-style-type: none"> Reference laboratories at the Regional/Global level which provide technical assistance and support to countries under the WHO network Receives clinical specimens/isolates for testing Performs specialized diagnostic tests and characterization of isolates Assesses epidemic strains by characterizing isolates genetically or phenotypically Provides technical assistance to NRLs Provides training Provides protocols, specialty reagents and positive controls as requested

PERIPHERAL LABORATORY	QUALIFIED TERTIARY LABORATORY	QUALIFIED REGIONAL LABORATORY	SUB-NATIONAL LABORATORY (SNL)	NATIONAL REFERENCE LABORATORY (NRL)	REGIONAL REFERENCE/GLOBAL SPECIALIZED LABORATORY (RRL/GSL)
	<ul style="list-style-type: none"> • Participates in external quality assessment programs provided by NRLs • Provides technical assistance to peripheral laboratories • Provides NEC with timely and quality-assured results of tested specimens • Regularly reports summary of data to NEC and relevant NRL 	<ul style="list-style-type: none"> • Submits positive bacterial isolates to NRLs for confirmatory testing, isolate banking and epidemic strain assessment • Participates in external quality assessment programs provided by NRLs • Provides technical assistance to tertiary and peripheral laboratories • Provides transport media to tertiary and peripheral laboratories • Provides NEC with timely and quality-assured results of tested specimens • Regularly reports summary of data to NEC and relevant NRL 	<ul style="list-style-type: none"> • Submits positive samples, unsubtypeables and proportion of negative samples to NRLs for re-testing, storage and further studies • Participates in external quality assessment programs provided by NRLs • Provides technical assistance to regional, tertiary and peripheral laboratories • Provides transport media to regional, tertiary & peripheral laboratories • Provides NEC with timely and quality-assured results of tested specimens 	<ul style="list-style-type: none"> • Assesses epidemic strains by characterizing isolates genetically or phenotypically (if applicable) • Sets guidelines for laboratory testing • Informs other laboratories of updates or alerts • Provides technical assistance to other laboratories • Trains staff from other laboratories for specimen collection and testing • Provides quality assessment to laboratories • Informs NEC, NCHFD and other stakeholders of the capability of tertiary and sub-national reference laboratories to perform specific tests • Provides NEC with timely and quality-assured results 	<ul style="list-style-type: none"> • Provides quality assessment to NRLs • Provides NRLs with timely and quality assured results which shall be shared to NEC

Annex H: General Guidelines on Specimen Collection

Safety and Decontamination

Safety and decontamination measures protect the specimen collector, laboratory staff and the patients from risk associated with specimen collection. Universal safety precaution requires health personnel to handle all clinical specimens as infectious. Thus, the use of basic protective equipment such as gloves, masks and eye protection. Safety work practices, such as handwashing before and after specimen collection; wearing of protective clothing at work places; disinfection of work areas and decontamination of blood spills and other bodily fluids, should be followed to reduce exposure to potentially infective material

Specimen Quantity and Quality

General provisions for specimen quality and quantity has been described in B.1.1 Specimen Requirements for Referral of outbreak specimen.

Specimen Container Considerations

If possible, all specimens should be in appropriate transport medium (e.g., VTM for viruses and Cary and Blair TM for bacteria causing diarrhea). Specimen should be placed aseptically in a sterile and/or appropriate container. The outside of the specimen container should always be cleaned and decontaminated. The type of container to be used is based on the clinical specimen as follows:

- ✚ Liquids should be contained in a leak-proof, screw capped container with a capacity of less than 1 liter;
- ✚ Solids must be stored in a sift-proof container weighing less than four kilograms;

Specimen Handling and Storage Prior to Shipment

In order to preserve the bacterial viability or viral integrity of microorganisms in specimen for culture or inoculation, specimens should be placed in appropriate transport media and stored at recommended temperatures. These conditions should also take into consideration the transportation time of the specimen. Other factors should also be taken into consideration

such as the type of specimen, the pathogen, and the sensitivity of the pathogen to desiccation, nutrient and pH.

Clinical specimens for viral isolation are acceptable for culture even after two days if it is stored in a specific media at 4-8 degrees Celsius. For longer period, preserved at -70 degrees Celsius.

For bacterial culture, specimen should be kept in appropriate transport medium at recommended temperature. Except for urine and sputum, most specimens may be kept at room temperature if processed within 24 hours. For longer periods, store it at 4-8 degrees Celsius is advised except for cold sensitive organisms such as shigella.

Annex I: List of International Laws for Transporting Dangerous Goods

Air	<p>The <i>Technical Instructions for the Safe Transport of Dangerous Goods by Air</i> published by the International Civil Aviation Organization (ICAO).</p> <p>The International Air Transport Association (IATA) publishes Dangerous Goods Regulation (DGR) that incorporates the ICAO provisions. The ICAO rules apply on all international flights.</p> <p>For national flights (within one country), the national civil aviation authorities apply national legislation.</p>
Road	<p><i>The European Agreement concerning the International Carriage of Dangerous Goods by Road</i> (ADR) applies to 49 countries. Modified versions of the convention are being used in South America and South East Asia</p>
Post	<p><i>Letter Post Manual</i> published by the Universal Postal Union reflects the United Nations Recommendations using the ICAO provisions as the basis for shipment</p>

Source: Guidance on the Regulation for the Transport of Infectious Substance 2017-2018. Geneva, Switzerland, WHO;2017

Annex J: List of Microorganisms Considered Under Category A Infectious Substance

- ❖ The table provided below is an indicative list taken from the 19th edition of the United Nations Model Regulations. In this table, the microorganisms written in italics are bacteria, mycoplasmas, rickettsiae or fungi.

INDICATIVE EXAMPLES OF INFECTIOUS SUBSTANCES INCLUDED IN CATEGORY A IN ANY FORM UNLESS OTHERWISE INDICATED	
UN Number and Proper Shipping Name	Microorganism
UN 2814 Infectious substance, affecting humans	<i>Bacillus anthracis</i> (cultures only)
	<i>Brucella abortus</i> (cultures only)
	<i>Brucella melitensis</i> (cultures only)
	<i>Brucella suis</i> (cultures only)
	<i>Burkholderia mallei</i> – <i>Pseudomonas mallei</i> – glanders (cultures only)
	<i>Burkholderia pseudomallei</i> – <i>Pseudomonas pseudomallei</i> (cultures only)
	<i>Chlamydia psittaci</i> – avian strains (cultures only)
	<i>Clostridium botulinum</i> (cultures only)
	<i>Coccidioides immitis</i> (cultures only)
	<i>Coxiella burnetii</i> (cultures only)
	Crimean-Congo haemorrhagic fever virus
	Dengue virus (cultures only)
	Eastern equine encephalitis virus (cultures only)
	<i>Escherichia coli</i> , verotoxigenic (cultures only) ¹
	Ebola virus
	Flexal virus
	<i>Francisella tularensis</i> (cultures only)
	Guanarito virus
	Hantaan virus
	Hantaviruses causing haemorrhagic fever with renal syndrome
	Hendra virus
	Hepatitis B virus (cultures only)
	Herpes B virus (cultures only)
	Human immunodeficiency virus (cultures only)
	Highly pathogenic avian influenza virus (cultures only)
	Japanese Encephalitis virus (cultures only)
	Junin virus
	Kyasanur Forest disease virus
	Lassa virus
	Machupo virus
	Marburg virus
	Monkeypox virus
	<i>Mycobacterium tuberculosis</i> (cultures only) ¹
	Nipah virus

Annex K: UN Number and Proper Shipping Name

UN Number and Proper Shipping Names for Category A Infectious Substance

Characteristic	UN Number	Proper Shipping Name
Causes disease in humans or both in humans and animals	UN 2814	INFECTIOUS SUBSTANCE, AFFECTING HUMANS
Causes disease only in animals	UN 2900	INFECTIOUS SUBSTANCE, AFFECTING ANIMALS ONLY

Assignment to UN2814 or UN 2900 shall be based on the known medical history and symptoms of the source human or animal, endemic local conditions, or professional judgement concerning individual circumstances of the source human or animal.

Source: Guidelines for Specimen Collection, Transport and Referral For Infectious Disease Outbreak Response. Manual for Clinical Specimens, RITM 2013

Annex L: Example of Hazard and Handling Labels

Source: *Guidance on the Regulation for the Transport of Infectious Substance 2017-2018*. Geneva, Switzerland, WHO;2017

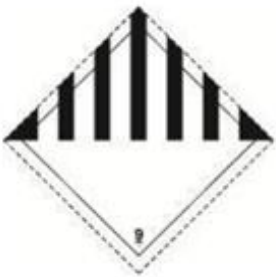
Box 2: Example of Hazard Labels (Annex)



Label name: Infectious substance Minimum dimensions: 100 × 100 mm (for small packages: 50 × 50 mm)
No. of labels per package: 1
Colour: Black and white

The words "INFECTIOUS SUBSTANCE" should be shown. The statement "In case of damage or leakage immediately notify a Public Health Authority" is required in some countries.

Hazard label for Infectious Substance Category A



Label name: Miscellaneous dangerous substances Minimum dimensions: 100 × 100 mm (for small packages: 50 × 50 mm)
No. of labels per package: 1
Colour: Black and white

Hazard label for certain non-infectious genetically modified organisms



Label name: Non flammable, non-toxic gas Minimum dimensions: 100 × 100 mm (for small packages: 50 × 50 mm)
No. of labels per package: 1
Colour: Green and white or green and black

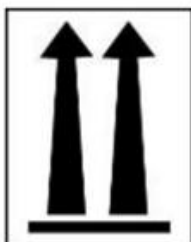
Hazard label for liquid nitrogen; substances packed using liquid nitrogen

Box 3: Example of Handling Labels (Annex)



Label name: Cryogenic liquid
Minimum dimensions: Standard A7: 74 × 105 mm
No. of labels per package: 1
Colour: Green and white

Handling label for cryogenic liquids



Label name: Orientation label
Minimum dimensions: Standard A7: 74 × 105 mm
No. per package: 2 on opposite sides
Colour: Black and white or red and white

The words "THIS SIDE UP" or "THIS END UP" may also be displayed on the top cover of the package.

Orientation label to indicate position of closures on the primary receptacles; for the air transport of quantities of liquid infectious substance in **Category A** that exceeds 50 ml per primary receptacle, this label shall be affixed to two opposite sides of the package with the arrows pointing to the right direction




Label name: Cargo Aircraft Only (CAO)
Minimum dimensions: 120 × 110 mm
(for small packages: 60 x 55 mm)
No. per package: 1 on opposite sides
Colour: Black on Orange (Pantone Colour No.151U)

Cargo Aircraft (CAO) is used on packages that may only be transported on a cargo aircraft

Annex M: Forms for Communicating Laboratory Results of Specimen in an Outbreak Response

Facility
Logo
Here

[LOGO] TESTING LABORATORY
OFFICIAL LABORATORY RESULT FORM FOR OUTBREAKS



SUSPECTED DISEASE : _____ DATE REPORTED (mm/dd/yy) ____ / ____ / ____
 TEST METHOD : _____
 REFERRING INSTITUTION : _____
 • Fax No / Tel. No. / E-mail : _____
 REQUESTING PHYSICIAN/HEALTH WORKER : _____ Page 1 of 1

SPECIMEN ID	PATIENT'S NAME	AGE	SEX	DATE OF ONSET OF SYMPTOMS (mm/dd/yy)	SPECIMEN TYPE	DATE OF SPECIMEN COLLECTION (mm/dd/yy)	DATE RECEIVED IN TESTING LABORATORY	RESULTS

TEST DETAILS:
TEST DISCLAIMERS/NOTE:

SIGNATORIES:

 [SIGNATURE]
 [NAME]
 Laboratory Technologist

 [SIGNATURE]
 [NAME]
 Laboratory Supervisor

 [SIGNATURE]
 [NAME]
 Pathologist

	<p style="text-align: center;">DEPARTMENT OF HEALTH RESEARCH INSTITUTE FOR TROPICAL MEDICINE Alabang, Muntinlupa City, Metro Manila (02) 807-2628 to 32 www.ritm.gov.ph</p>	<p>Document Control No.: LRD-DIV-SPE-FM-006</p>
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OFFICIAL RITM LABORATORY TEST RESULTS FORM

Name of Patient: <small>(Full Last Name, First Name, Middle Name)</small>		
Age/Sex: /		Date of Birth: 09/09/2014 <small>(DD/MM/YYYY)</small>
Patient Location: <input type="checkbox"/> OPD <input type="checkbox"/> Referral <input type="checkbox"/> INPATIENT		RITM Hospital No: <small>RITM patients</small>
Requisitioner:		Date of Admission: 09/09/2014 <small>(DD/MM/YYYY) RITM patients</small>
		Address:
Specimen Type: BLOOD	Accession No.: 14-	Laboratory No.:
Date and Time of Specimen Collection: <small>(DD/MM/YYYY HH:MM)</small> 09/09/2014 00:00 AM/PM		Date and Time of Specimen Receipt: <small>(DD/MM/YYYY HH:MM)</small> 09/09/2014 00:00 AM/PM
Date and Time of Release of Results: <small>(DD/MM/YYYY HH:MM)</small> 09/09/2014 00:00 AM/PM		
LABORATORY TEST RESULTS		
FINAL RESULT		
LABORATORY TEST PERFORMED:		
TEST RESULT:		
COMMENTS:		
Performed by: _____, RMT Medical Technologist	Validated by: _____, RMT Laboratory Supervisor	Noted by: _____, MD Department Head/Pathologist

Laboratory Result Cover Letter Template

Testing Facility Official Logo and Letterhead here
--

[DATE]

[NAME]
Director
[CHD]

THRU: [NAME], Head of [RESU]

Dear [CHD DIRECTOR],

This is to inform you of the [TEST PERFORMED] results of specimen/s from [REFERRING INSTITUTION/ESU] for the [OUTBREAK NAME] in [OUTBREAK SITE]. [NUMBER OF SPECIMEN] specimens were received [DATE] at [TIME] in the [TESTING LABORATORY].

Kindly refer to the attached Official Laboratory Results Form for the test details and result.

Thank you very much.



Respectfully,

[SIGNATURE]
[NAME]
Head
[Testing Laboratory]

CC: ENRIQUE A. TAYAG, MD, PHSAE, FPSMID, CESO III, Director IV, National Epidemiology Center
[Referring Institution / ESU]
[Testing Laboratory's Division Chief]
[Testing Laboratory's Institutional Director]

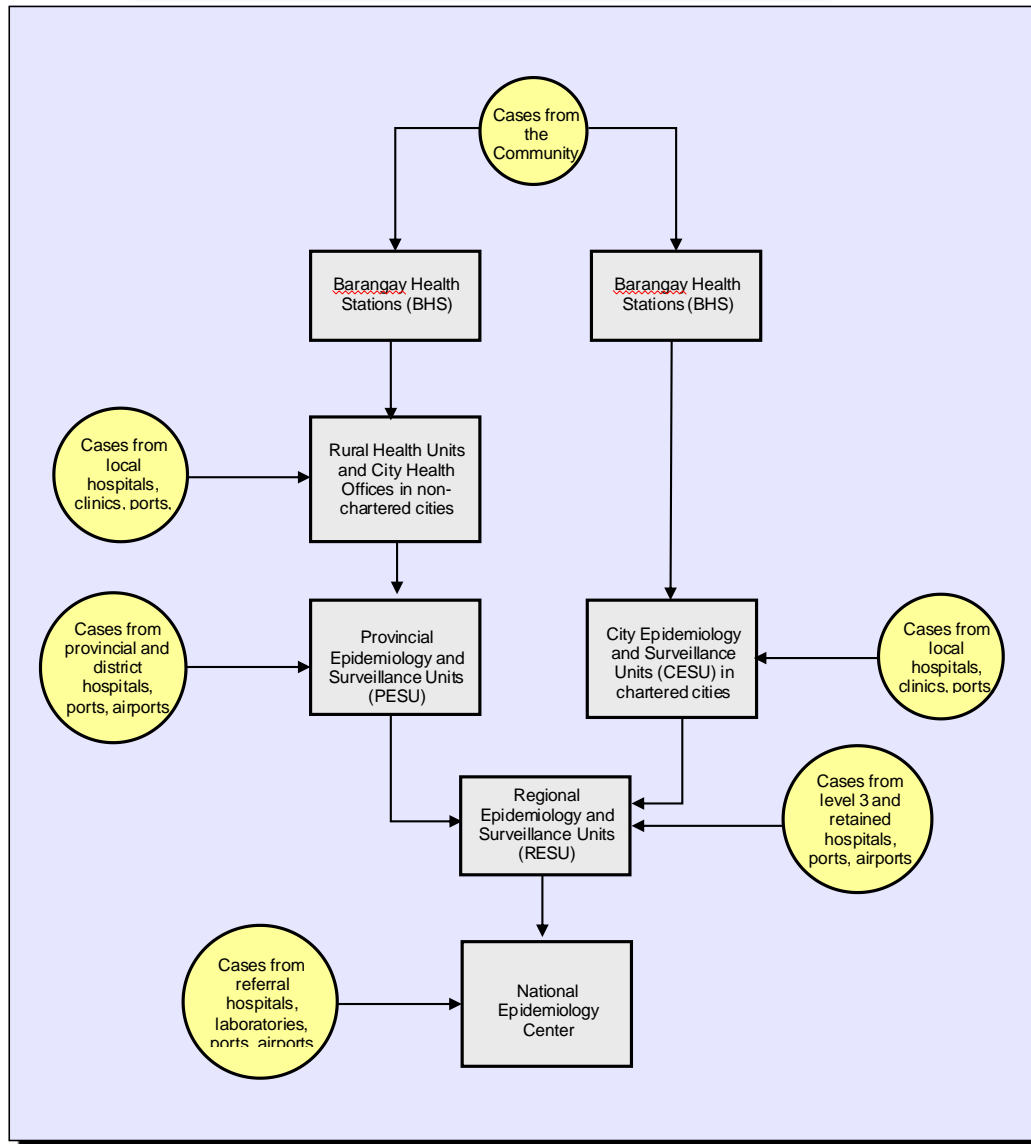
Annex N: Laboratory Referral Form for Outbreak Testing

Source: Guidelines For Specimen Collection, Transport and Referral For Infectious Diseases Outbreak Response; Manual For Clinical Specimen, RITM 2013

 Official Laboratory Referral Form for Outbreak Testing 										
<small>GENERAL INSTRUCTIONS: THIS FORM SHALL BE USED TO ENSURE ALL DATA ARE ACCURATE. WRITE LEGIBLY IN BLOCK LETTERS. ALL REQUESTS FOR OUTBREAK TESTING SHOULD BE COORDINATED WITH THE APPROPRIATE EPIDEMIOLOGIC SURVEILLANCE UNIT (ESU).</small>										
SENDER CONTACT INFORMATION (to be filled up by Requestor. This information is needed for communicating with testing institution.)										
Name of DRU					Type: <input type="checkbox"/> RHU <input type="checkbox"/> CHO <input type="checkbox"/> Gov't Hospital <input type="checkbox"/> Private Hospital <input type="checkbox"/> Clinic					
Address					<input type="checkbox"/> Gov't Laboratory <input type="checkbox"/> Private Laboratory <input type="checkbox"/> Port/Airport <input type="checkbox"/> Other _____					
Requesting MD/DO					Authorized Contact Person for shipment:					
Contact no (Tel/Fax)					E-mail address					
TESTING FACILITY INFORMATION (to be filled up by Requestor. This information is needed for documenting the laboratory to which the specimens will be sent.)							OUTBREAK INFORMATION (to be filled up by Requestor. This information is needed to guide testing)			
TESTING FACILITY			COMPLETE ADDRESS		CITY	SUSPECTED AGENT/ PATHOGEN				
TYPE (check)	<input type="checkbox"/> Peripheral Lab <input type="checkbox"/> Tertiary Lab <input type="checkbox"/> Regional Lab <input type="checkbox"/> Sub-National Lab <input type="checkbox"/> National Reference Lab				PROVINCE	CLINICAL FEATURES				
					REGION	CLINICAL IMPRESSION				
TEL/FAX NO.			CONTACT PERSON		TESTS REQUESTED					
SPECIMEN DETAILS (to be filled up by Requestor. If there are more than ten (10) specimens sent, accomplish an additional form.)										
#	EPID Case ID	PATIENT'S NAME (LAST NAME, FIRST NAME, MI)	DATE OF BIRTH (MM/DD/YY)	AGE (YR/MO)	SEX (M/F)	SPECIMEN TYPE	DATE OF ONSET (MM/DD/YY)	DATE COLLECTED (MM/DD/YY)	TIME COLLECTED (HH:MM:AM/PM)	REMARKS
1										
2										
3										
4										
5										
6										
7										
8										
9										
10										
SHIPMENT DETAILS (to be filled up by Requestor)					SPECIMEN RECEIPT AND CONDITION (to be filled up by Authorized Testing Facility Staff Only)					
Total No. of Specimens		Date Shipped/Sent		Date Received (MM/DD/YY)	Time Received (HH:MM/AM/PM)		No. of test packs _____ Qty of test packs: <input type="checkbox"/> Frozen <input type="checkbox"/> Shipped hot <input type="checkbox"/> Warm (see)			
Mode of Delivery		Hand-carried <input type="checkbox"/> Courier _____		Received by: (Name and Signature)		Type of Container: _____				
Tracking Number										

Annex O: Flow of Weekly PIDSR reports

Fig. 3 Flow of Weekly Reporting of Notifiable Diseases



Source: *Manual of Procedures for Philippines Integrated Disease Surveillance and Response 3rd Edition*; Epidemiology Bureau, Department of Health

Annex P: Description of FWBD Diseases on Surveillance

Features	Cholera	Hepatitis A	Rotavirus	Typhoid and Paratyphoid
Etiologic Agent	<i>Vibrio cholerae</i> serogroup O1 and O139; biotypes Classical and El Tor	<i>Hepatitis A virus</i>	<i>Rotavirus</i> a double stranded RNA virus which cause more than 90% infections in humans	<i>Salmonella typhi</i> <i>Salmonella paratyphi</i>
Epidemiology	<p>Around 1.3-4 M estimated cholera cases yearly with deaths ranging from 21,000 to 143,000 worldwide. In 2016, the number of notified cases and deaths from 38 countries were 132,121 and 2,420 respectively (WHO Fact sheet)</p> <p>In the Philippines, a total of 3,653 cases of cholera was notified in 2017 (January-December 2); with 27 deaths (CFR=0.74). Out of the 3653 cholera cases notified, 370 (10%) submitted samples for confirmation. Thirty-five percent (130/370) were laboratory confirmed cholera.</p>	<p>Globally, it is estimated that 1.4 M people are infected with Hepatitis A very year (WHO, 2014). And Hepatitis A caused approximately 11,000 deaths in 2015 accounting for 0.8% of mortality from viral hepatitis (WHO Global Health Report on Hepatitis).</p> <p>In country, a total of 422 Hepatitis A cases notified in 2017; with one death reported. This is 35% lower as compared to the total notified cases in 2016. All regions have notified cases of Hepatitis A. However, most of the cases came from Region VII contributing 25% (109/422). All reported cases were tested for Hepatitis A. And all showed reactive for IgM anti-HAV.</p>	<p>Rota virus are the most common cause of severe diarrhea diseases in young children. In 2013, WHO estimates about 215,000 of under-five children die each year from rotavirus. Majority of these children live in low income countries (WHO -Immunization, Vaccines and Biologicals).</p> <p>In the Philippines, 3,512 cases were notified in 2017; with 27 deaths (CFR=0.77%). This is lower than the 2016 notified cases (4,718). Of the 3,512 cases notified, 1,247 (36%) were laboratory confirmed.</p>	<p>It is estimated that 11-20 M people get sick from typhoid fever and between 128,000 to 161,00 died from it (WHO Fact Sheet).</p> <p>In 2017, the country's surveillance system received a total of 21,653 typhoid cases and 40 deaths. This is 28% lower than the cases notified in 2016 (29, 984). However, the culture confirmed cases (345) is still 11% higher than the 2016 data reported</p>

Features	Cholera	Hepatitis A	Rotavirus	Typhoid and Paratyphoid
Incubation Period	Few hours to 5 days	15-50 days (average: 28-30 days)	1-3 days	Typhoid fever: 3-60 days (ranges from 8-14 days) Paratyphoid: 1-10 days
Period of communicability	From onset of illness until recovery	1-2 weeks before and at least one week after onset of illness	First 2-5 days	From one week until the individual has recovered
Case Definition:	<p>Suspected Case:</p> <ul style="list-style-type: none"> - A person aged 5 years or more with severe dehydration or who died from acute watery diarrhea (If diseases is unknown in the area); - For endemic area: A person aged 5 years or more with acute watery diarrhea with or without vomiting; - In area where there is cholera, a person with acute watery diarrhea with or without vomiting <p>Probable Case: Not applicable</p> <p>Confirmed Case: A suspected case that is laboratory-confirmed through isolation of <i>Vibrio Cholerae</i> from the stool of the patient.</p>	<p>Under the PIDSr, there is case definition for Hepatitis.</p> <p>Suspected Case: A person with an acute illness characterized by acute jaundice, dark urine, loss of appetite, body weakness, extreme fatigue and high upper quadrant tenderness</p> <p>Probable case: not applicable</p> <p>Confirmed case: a suspected case confirmed by positive result for IgM anti-HAV</p>		<p>Suspected Case: A person with an illness characterized by insidious onset of sustained fever, headache, malaise, anorexia, relative bradycardia, constipation or diarrhea, and non-productive cough.</p> <p>Probable Case: A suspected case that is epidemiologically linked to a confirmed case in an outbreak.</p> <p>Confirmed Case: A suspected or probable case that is laboratory confirmed through isolation of <i>Salmonella enterica</i> from blood, stool and other clinical specimen</p>

Clinical Presentation	<p>90% of cases mild to moderate diarrhea</p> <p>5%-10% of cases manifest as sudden onset of profuse, painless, watery stools with nausea and vomiting. Stools are colorless with flecks of mucous – “rice water diarrhea”.</p>	<p>Abrupt onset of fever; malaise; anorexia; nausea and vomiting; abdominal discomfort; dark urine and pale stool followed by icteric phase (development of jaundice). Icteric phase usually begins 10 days after onset of symptoms.</p> <p>In children 5 years and below, only 30% shows any symptoms.</p>	<p>Fever; vomiting; and watery non-bloody diarrhea</p>	<p>Characterized by insidious onset of sustained fever; severe headache; malaise; anorexia; a non-productive cough and hepatosplenomegaly in 50% of cases</p> <p>It can also manifest as non-specific symptoms of chills, diaphoresis; dizziness; muscle pain; weakness that usually occurs before the onset of fever</p>	
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Annex Q: PIDSR reporting Forms



PIDSR

Philippine Integrated Disease
Surveillance and Response

Republic Act 3573 (Law of Reporting of Communicable Diseases), requires all individuals and health facilities to report notifiable diseases to local and national public health authorities.

Weekly Notifiable Disease Report

Summary Page

Disease Reporting Unit: _____
(Name of RHU/CHQ/Hospital/Clinic/Laboratory/Port/Airport):

(For hospitals or clinics) Indicate type of facility: ☐ Gov't. ☐ Private Telephone No. _____

This report was prepared by: _____ Date: ____/____/____
(Signature over printed name)

This report was submitted to _____ Date: ____/____/____
(Name of RHU/CHQ/PHO/CHD):

This report was approved by: _____ Date: ____/____/____
(Name & Signature of Head of office/unit/hospital/clinic)

List of Notifiable Diseases/Syndromes

Indicate the number of case/s in the corresponding line for case/s of disease/syndrome seen and "0" if no cases seen.

Category I (Immediately Notifiable)

____ Acute Flaccid Paralysis
____ Adverse Event Following Immunization (AEFI)
____ Anthrax
____ Human Avian Influenza
____ Measles
____ Meningococcal Disease
____ Neonatal Tetanus
____ Paralytic Shellfish Poisoning
____ Rabies
____ Severe Acute Respiratory Syndrome (SARS)

Category II (Weekly Notifiable)

____ Acute Bloody Diarrhea
____ Acute Encephalitis Syndrome
____ Acute Hemorrhagic Fever Syndrome
____ Acute Viral Hepatitis
____ Bacterial Meningitis
____ Cholera
____ Dengue
____ Diphtheria
____ Influenza-like illness
____ Leptospirosis
____ Malaria
____ Non-neonatal Tetanus
____ Pertussis
____ Typhoid and Paratyphoid Fever

Category I: Notify simultaneously the PHO, CHD and NEC within **24 hours** of detection and send advance copy of the Case Investigation Form (CIF) as soon as possible.

Category II: Report all cases of notifiable diseases/syndromes every **FRIDAY** of the week to the next higher level using the Case Report Form (CRF).

Reminder: Submission of report is every **FRIDAY** of the week. The weekly report should include this page (Summary Page), Case Investigation Forms (CIF) and the Case Report Forms (CRF).



"Let's help prevent epidemics"

Acute Bloody Diarrhea
Case Report Form



Name of DRU: ___RHU ___Hospital/clinic ___Laboratory ___Port/Airport _____ Type: ___Government ___Private

Patient No.	Patient's Full Name	Age	Sex	Date of Birth	Complete Address	Admitted?	Date Admitted/seen/consulted	Date onset of illness	Stool culture result	Outcome
				___/___/___			___/___/___	___/___/___		
				___/___/___			___/___/___	___/___/___		
				___/___/___			___/___/___	___/___/___		
				___/___/___			___/___/___	___/___/___		
				___/___/___			___/___/___	___/___/___		
				___/___/___			___/___/___	___/___/___		
				___/___/___			___/___/___	___/___/___		
				___/___/___			___/___/___	___/___/___		
				___/___/___			___/___/___	___/___/___		
Response Codes / Instructions	Indicate First name, M.I., Last name	Age: Indicate D - days M - months Yr. - years Sex: F - Female M - Male		mm/dd/yy	Specify House #, Street/Purok, Brgy., Municipality/City/, Province	Y - Yes N - No	mm/dd/yy	mm/dd/yy	P - Positive (specify organism) N - Negative ND - Not done U - Unknown	A - Alive D - Died (specify date)

Case Definition:

- A person with acute diarrhea with mucous or visible blood in the stool.

Note: Laboratory culture of stools may be used to confirm possible outbreaks of specific diarrhea, such as *S. dysenteriae* type 1, but is not necessary for case definition.

- Case classification: Not applicable



Name of DRU: ___RHU ___Hospital/clinic ___Laboratory ___Port/Airport _____ Type: ___Government ___Private

Patient No.	Patient's Full Name	Age	Sex	Date of Birth	Complete Address	Admitted?	Date Admitted/seen/consulted	Date onset of illness	Stool Culture result	Case Classification	Outcome
				___/___/___			___/___/___	___/___/___			
				___/___/___			___/___/___	___/___/___			
				___/___/___			___/___/___	___/___/___			
				___/___/___			___/___/___	___/___/___			
				___/___/___			___/___/___	___/___/___			
				___/___/___			___/___/___	___/___/___			
				___/___/___			___/___/___	___/___/___			
				___/___/___			___/___/___	___/___/___			
				___/___/___			___/___/___	___/___/___			
Response Codes / Instructions	Indicate First name, M.I., Last name	Age: Indicate D - days M - months Yr. - years Sex: F - Female M - Male		mm/dd/yy	Specify House #, Street/Purok, Brgy., Municipality/ City/, Province	Y - Yes N - No	mm/dd/yy	mm/dd/yy	P - Positive (specify organism) N - Negative ND - Not done U - Unknown	S - Suspect C - Confirmed	A - Alive D - Died (specify date)

Case Definition/Classification:

• **Suspected case:**

- *Disease unknown in the area:* A person aged 5 years or more with severe dehydration or who died from acute watery diarrhea, **OR**
- *Disease endemic in the area:* A person aged 5 years or more with acute watery diarrhea with or without vomiting, **OR**
- *In an area where there is a cholera epidemic:* A person with acute watery diarrhea, with or without vomiting.

• **Probable:** Not applicable

- **Confirmed case:** A suspected case that is laboratory-confirmed

Laboratory Confirmation of Cholera:

- Isolation of *Vibrio cholerae* 01 or 0139 from stools in any patient with diarrhea

Typhoid and Paratyphoid Fever (ICD 10 Codes: A01.0, A01.1-A01.4)
Case Report Form



Name of DRU: ___RHU ___Hospital/clinic ___Laboratory ___Port/Airport _____ Type: ___Government ___Private

Patient No.	Patient's Full Name	Age	Sex	Date of Birth	Complete Address
				___/___/___	
				___/___/___	
				___/___/___	
				___/___/___	
				___/___/___	
				___/___/___	
				___/___/___	
				___/___/___	
				___/___/___	
				___/___/___	
				___/___/___	
Response Codes / Instructions		Age: Indicate D - days M - months Yr. - years Sex: F - Female M - Male		mm/dd/yy	Specify House #, Street/Purok, Brgy., Municipality/City/, Province

Case Definition/Classification:

- Suspected case:** A person with an illness characterized by insidious onset of sustained fever, headache, malaise, anorexia, relative bradycardia, constipation or diarrhea, and non-productive cough.
- Probable case:** A suspected case that is epidemiologically linked to a confirmed case in an outbreak.
- Confirmed case:** A suspected or probable case that is laboratory confirmed.

Laboratory Confirmation:

- Isolation of *Salmonella enterica* from blood, stool, or other clinical specimen

Acute Viral Hepatitis (ICD 10 Codes: B15-B17)
Case Report Form



Name of DRU: ___RHU ___Hospital/clinic ___Laboratory ___Port/Airport _____ Type: ___Government ___Private

Patient No.	Patient's Full Name	Age	Sex	Date of Birth	Complete Address	Admitted?	Date admitted/seen/consulted	Date onset of illness	Laboratory Result	Case Classification	Outcome
				___/___/___			___/___/___	___/___/___			
				___/___/___			___/___/___	___/___/___			
				___/___/___			___/___/___	___/___/___			
				___/___/___			___/___/___	___/___/___			
				___/___/___			___/___/___	___/___/___			
				___/___/___			___/___/___	___/___/___			
				___/___/___			___/___/___	___/___/___			
				___/___/___			___/___/___	___/___/___			
				___/___/___			___/___/___	___/___/___			
				___/___/___			___/___/___	___/___/___			
Response Codes / Instructions	Indicate First name, M.I., Last name	Age: Indicate D - days M - months Yr. - years Sex: F - Female M - Male		mm/dd/yy		Y - Yes N - No	mm/dd/yy	mm/dd/yy	Specify	S-Suspect C-Confirmed	A - Alive D - Died (specify date)

Case Definition/Classification:

- Suspected case:** A person with acute illness characterized by acute jaundice, dark urine, loss of appetite, body weakness, extreme fatigue, and high upper quadrant tenderness.
- Probable:** Not applicable
- Confirmed Case:** A suspected case that is laboratory confirmed

Laboratory Confirmation:

- Hepatitis A: Positive for IgM anti-HAV
- Hepatitis B: Positive for Hepatitis B surface antigen (HBsAg) or Positive for IgM anti-HBc
- Hepatitis C: Positive for anti-HCV
- Non-A, non-B: Negative for IgM anti-HAV and IgM anti-HBs (or HBsAg)

Annex R: Conditions of National and International Concern

- + Epidemic linked with nationally or internationally distributed product: Epidemic linked by investigation to a product that has national or international distribution, such as a manufactured food item, that has the potential to affect individuals in municipalities and cities simultaneously.
- + Case(s) of exotic disease acquired locally: All cases of illness due to communicable diseases that are not endemic in the Philippines should be investigated rapidly to confirm whether the illness has been acquired locally or from overseas. Human avian influenza, SARS, Ebola, poliomyelitis are among the exotic diseases that are of national importance.
- + Diseases with high pathogenicity: Epidemics of highly-virulent organisms (e.g., Ebola) are likely to cause heightened public concern, and may require technical expertise and collaboration at the national level.
- + Diseases with significant risks of international spread
- + Epidemics in tourist facilities, among foreign travelers or at national/international events.
- + Epidemics associated with health service failure: Epidemics linked to breakdown in standards of health care delivery, such as infection control failure, blood product contamination or systematic immunization failure will require a strategic national approach.

Source: Manual of Procedures for Philippines Integrated Disease Surveillance and Response 3rd Edition; Epidemiology Bureau, Department of Health

Annex S: Core Function of EICT

- ✚ Conduct epidemiologic investigation of epidemics suspected or confirmed.
- ✚ Establish active surveillance in the affected area.
- ✚ Implement the epidemic response plan.
- ✚ Identify and coordinate other sources of additional human (multi-sectoral teams in the area) and material resources (list of referral laboratories and available examinations, list of referral hospitals) for managing the epidemic
- ✚ Ensure the use of standard treatment protocols for the disease and train health workers.
- ✚ Oversee the implementation of control measures.
- ✚ Meet daily to review the latest surveillance data and implement additional control measures.
- ✚ Provide regular feedback to the community, LGU, PHO, CHD, DOH and WHO.
- ✚ Request assistance when necessary.
- ✚ Perform other tasks as instructed by the head of office or agency

Annex T: National Health Promotion and Communication Plan

I. Program Title: Food and Waterborne

II. Rationale:

- Food and Water-borne Diseases (FWBD) are usually manifested as diarrhea.
- It is considered as the leading cause of morbidity in the Philippines which is second to pneumonia.
- Several notable outbreaks of food and water-borne diseases occurred in 2015. There were total of 29,764 typhoid cases and 4307 cholera cases during that year, eight hundred thirty-nine hepatitis A cases and 74 cases of paralytic shellfish poisoning were also reported. Eleven thousand eight hundred seventy-six cases of acute bloody diarrhea (ABD) were reported from sentinel sites nationwide. (Department of Health 2015)
- Parent's knowledge on the signs and symptoms of food and water-borne diseases are very limited.
- Food and Water-borne Diseases Prevention and Control Program aimed at reducing the morbidity and mortality rate due to diarrhea Food and Waterborne Diseases (FWBD) including outbreaks
- This Health Promotion and Communication Plan is developed to support the (FWBD) program in achieving its objectives.

III. Behavioral Objectives:

By end of 2022

- 90% of parents are able to detect early signs and symptoms of Food and Water-borne Diseases and submit patient to the nearest health facility
- 90% Of parents with diarrheal cases in the family are able to give Oral Rehydration Therapy as first aid
- 100% of Health workers are providing correct and appropriate treatment to FWBDs patients
- 90% LGUs fully support the FWBD program by providing financial human resources.

IV. Communication Matrix

TARGET AUDIENCE	COMMUNICATION OBJECTIVES	CURRENT BEHAVIOR	TARGET BEHAVIOR	GAPS/ ISSUES	KEY MESSAGES	STRATEGIES	IEC MATERIALS
Parents category (CDE)	To create awareness of parents on the signs and symptoms of the different FWBD diseases.	Parents takes for granted diarrhea because they are not aware that it might be a sign of FWBD.	<p>Parents are able to detect early signs of symptoms of FWBD.</p> <p>Parents with diarrheal cases in the family should be able to give Oral Rehydration Therapy at home.</p>	Lack of knowledge on FWBD disease and risk	<p>FWBD if not treated may lead to death</p> <p>Signs and Symptoms and prevention of FWBD (Infectious Bloody, Diarrhea, Typhoid Fever, Cholera, Amoebiasis, Rotavirus and Salmonella)</p> <p>Preparation of Oral Rehydration Therapy in case there is no available ORESOL.</p> <p>Go to the nearest health center if signs and symptoms occurs.</p> <p>Continue breastfeeding</p>	<p>IEC development and dissemination</p> <p>Inter—Personal Communication (IPC) with parents during mothers class</p>	<p>AVP, TV and Radio commercial</p> <p>Poster</p> <p>Advisories/flyers</p>

Health Workers	To educate health workers on the different FWBDs signs, symptoms and management.	No focus on specific program Reactive response to cases	Health workers are able to provide correct and appropriate treatment to FWBDs patients	Multitasking Lack of resources Lack of manpower Lack of incentives Lack of guidelines	Correct and appropriate management of FWBDs. Referral system for difficult cases	Orientation/Re orientation HW on FWBD Program	Flip chart Guidelines on diarrhea management FAQs Fan
LGU/stakeholders	To encourage LGUs to support the FWBD Program by providing financial and human resources.	LGUs do not allocate budget for FWBD because of other priorities	LGUs support the FWBD program by providing financial and human resources	No funding Not priority No knowledge of WFBD program and it's the risk of the diseases to the community	Brief Overview of FWBD Program Importance of LGU/stakeholders support to the program.	Advocacy Meeting	Advocacy Kit AVP

v. Strategies/ Activities/ Timeline

STRATEGIES	ACTIVITIES	TARGET				TOTAL TARGET	TOTAL COST c/o FWBD Budget	RESPONSIBLE PERSON
		1 ST QTR	2 ND QTR	3 RD QTR	4 TH QTR			
I. Building Healthy Public Policy								
	A. Development of policies							
	a.1 AO on FWBD		/	/	/			Program
	a.2 MOP			/	/			Program
	a.3 Department Memorandum on the conduct of information dissemination and advocacy activities related to FWBD.				/			HPCS (MERD)
	B. Review of policies							
	b.1 Review of AO							
	b.2 review of AO							
II. Creating Supportive Environment								
	A. Conduct of Partners' meeting			/	/		50,000.00	HPCS (MERD)
	B. Advocacy events/summit/ launching			/	/		300,000.00	HPCS (MERD)
III. Developing Personal Skills								
	A. Conduct of Capability Training							
	a.1 Training on Regional Coordinators and HEPOs	/					150,000.00	Program & HPCS (CMMD)
	a.2 PIR				/		150,000.00	Program and HPCS (CMMD)
	B. Social Media/ Web Hosting		/					

	C. Quad Media							
	c.1 TV placement for						1,500,000	HPCS (CMMD)
	c.2 Radio Placement for							
	c.3 Cinema for							
	c.4 Outdoor media for							
	c.4.a. Billboards							
	c.4.b Train Wrap							
	c.5 Print Publication							
	D. Production							
	d.1 The Dr. is In	/						
	d.2 Priority Health Program							
	d.3 Radio Segments							
	E. Development of IEC Materials							
	e.1 posters (50,000 copies)	/					500,000	HPCS (CMMD)
	e.2 flyers (advisory 500,000 copies)	/					1,000,000	HPCS (CMMD)
	e.3 tarpaulin							
	e.4 collaterals (fan 100,000pcs) Materials – Board panel 1 panel for FWB disease	/					2,000,000	HPCS (CMMD)
	e.5 Flip tarp (2,500 copies)	/					2,500,000	HPCS (CMMD)
	e.6 Brochure							
	e.7 Advocacy Kit (10,000 pcs)	/					500,000	HPCS (CMMD)
IV. Reorienting Health Services	A. Training of HEPOs							
	B. Development of Communication Plan							
	C. Development of risk comm plan							
	D. Harmonize Awarding							
V. Strengthening community actions	A. Lakbay Buhay Kalusugan B. KP Roadshow							

Annex U: National Health Advisory (Sample)

Republic of the Philippines
Department of Health
OFFICE OF THE SECRETARY
Building 1, San Lazaro Compound, Rizal Avenue, Sta. Cruz, Manila 1003
Tel. Nos. 743-8301 loc.1125, 1132 / Fax 743-1829, 743-1796 / Direct 711-9502, 711-9503
osec@doh.gov.ph

30 June 2004

DEPARTMENT CIRCULAR

No. 191, s. 2004

**TO: ALL CENTER FOR HEALTH DEVELOPMENT DIRECTORS, CHIEF
OF ALL DOH RETAINED, SPECIALTY / SPECIAL HOSPITALS**

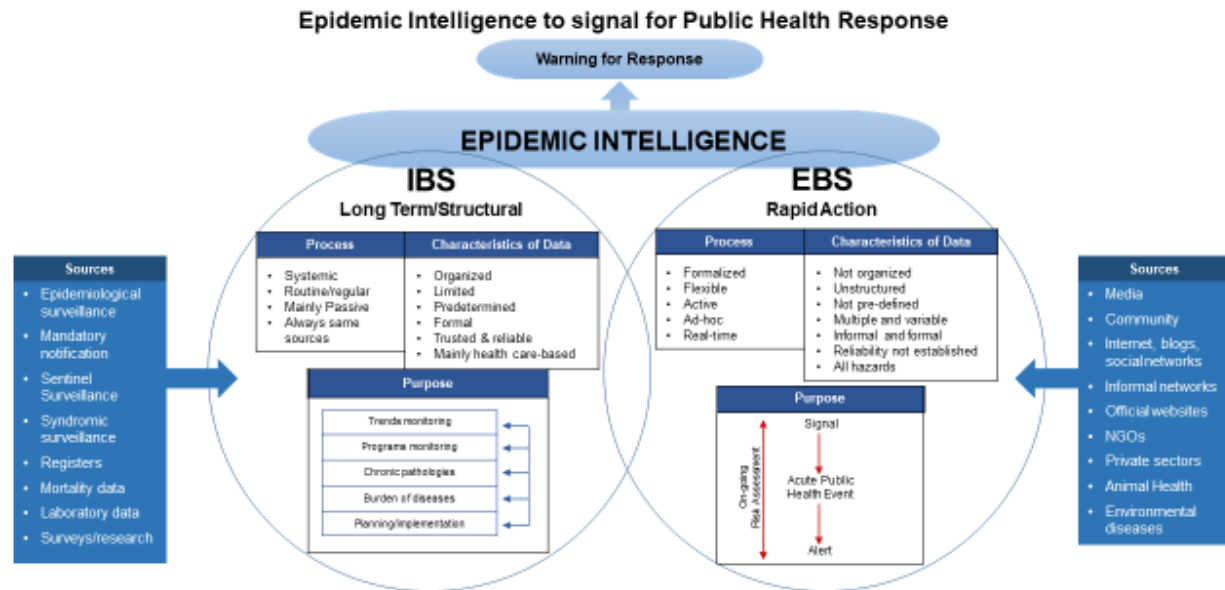
**SUBJECT: ALERT FOR POSSIBLE DIARRHEA OUTBREAK PARTICULARLY
CHOLERA DURING THE RAINY SEASON**

With the onset of the rainy season, an increase in the trend of food-borne and water-borne diarrheal diseases is anticipated. The Department of Health is reminding all Center for Health Development Directors and Chiefs of Hospitals to be alert and ready for contingency measures for the possible outbreak of diarrhea particularly Cholera. Moreover, health education activities on the preventive measures of diarrhea should be intensified (see attached Health Advisory). Boiling and/or chlorination of drinking water must be emphasized particularly in areas with poor quality of water supply.

For strict compliance.


MANUEL M. DAYRIT, MD, MSc
Secretary of Health

Annex V: Epidemic Intelligence



Source: World Health Organization. *Early Warning and Response for Public Health Events*



Boosting
Universal Health Coverage

Republic of the Philippines
Department of Health
Office of the Secretary

