



# COUNTRY SITUATION UPDATES: Cholera

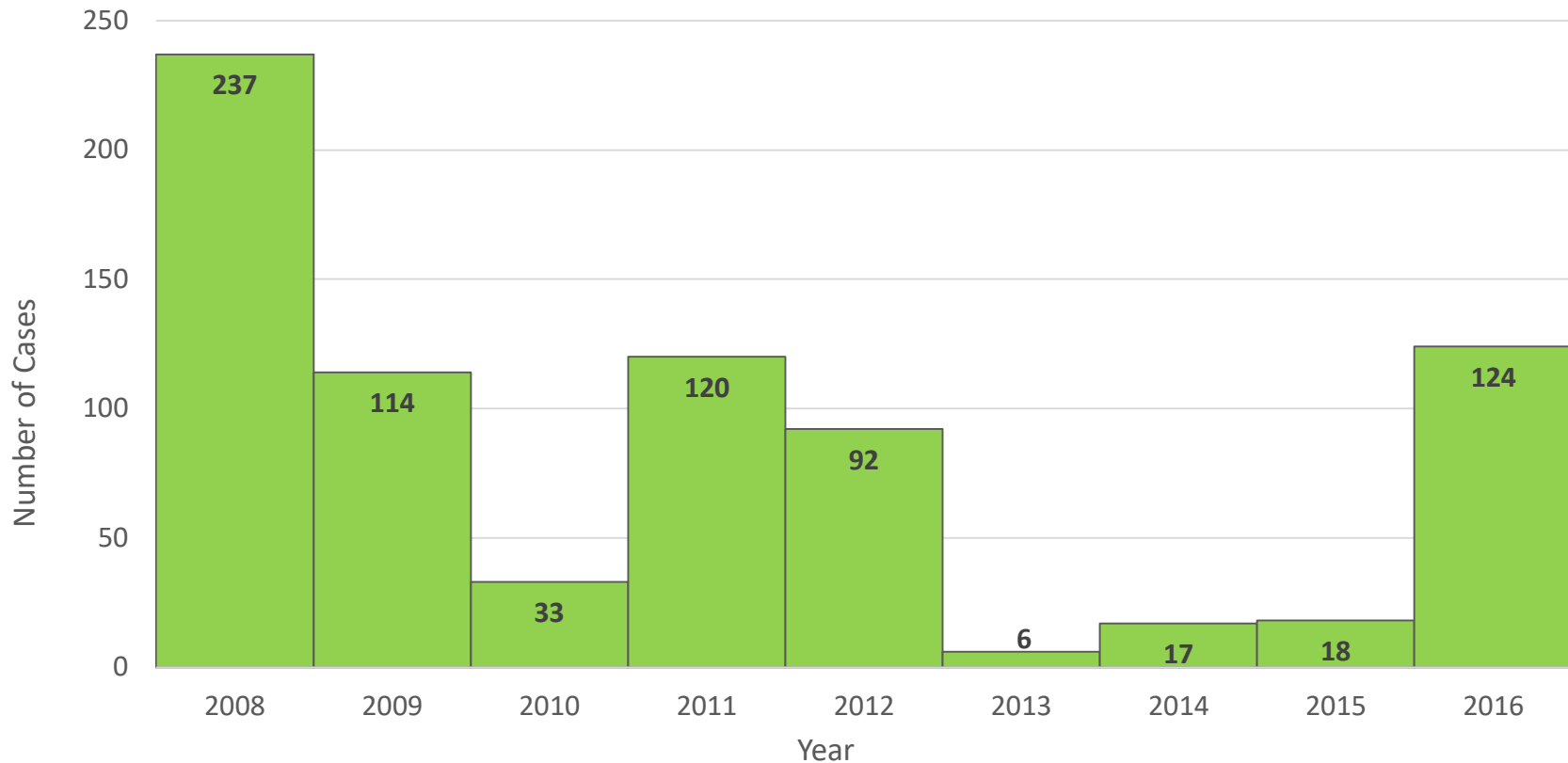
Philippines

# Outline of Presentation

- Cholera Epidemiology Updates
- Progress in the Prevention & Control
- Country Capacities



**Fig. 1 Confirmed Cholera Cases by Year  
Philippines, 2008-2016**



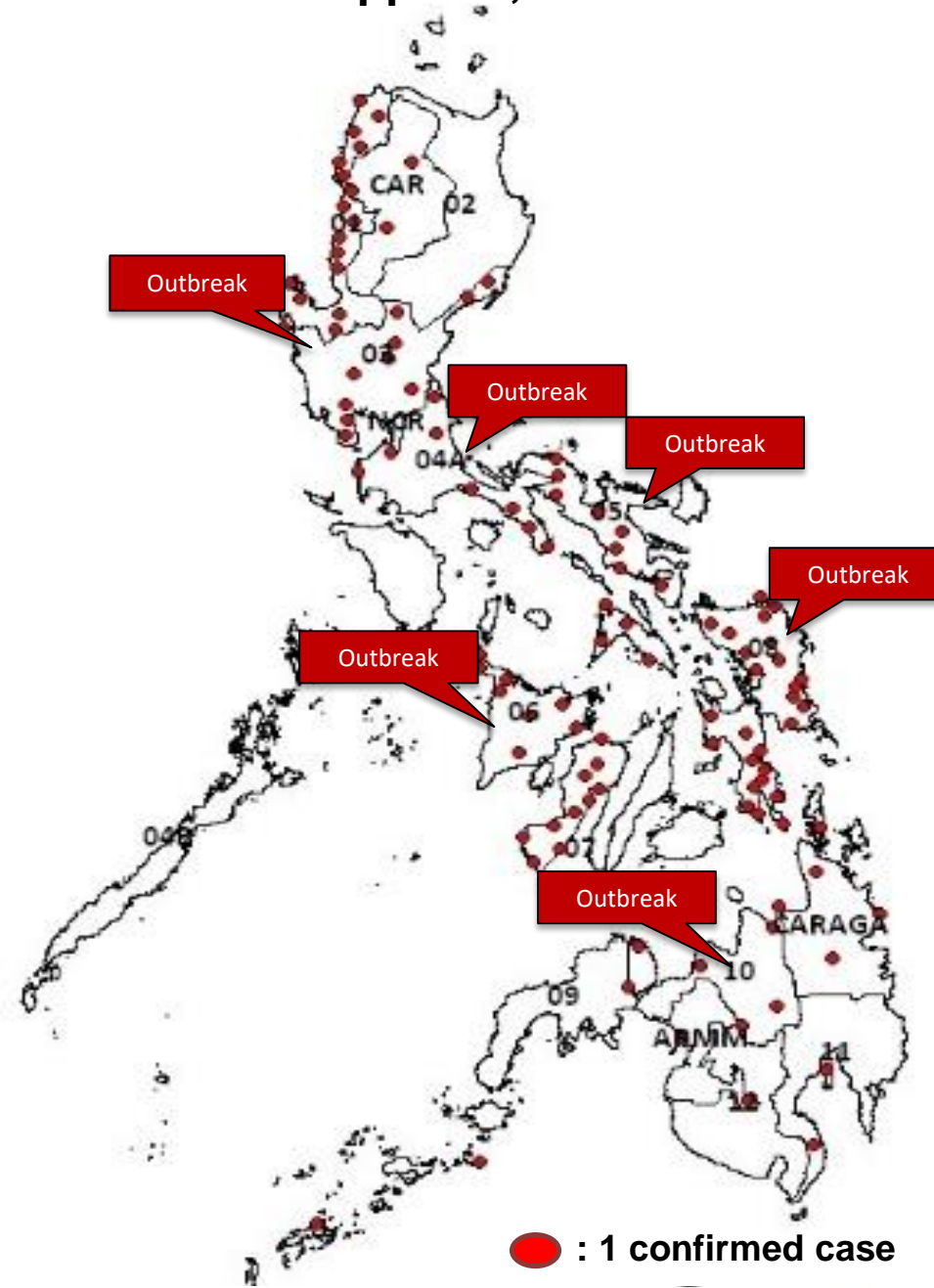
- In 2016, a total of **14,592 diarrheal** cases were reported in the Philippines. Among which, **96 deaths** were reported.
- Of diarrheal cases, **124 (0.85%)** cases were laboratory **confirmed cholera**. Of the laboratory confirmed cases, none died.



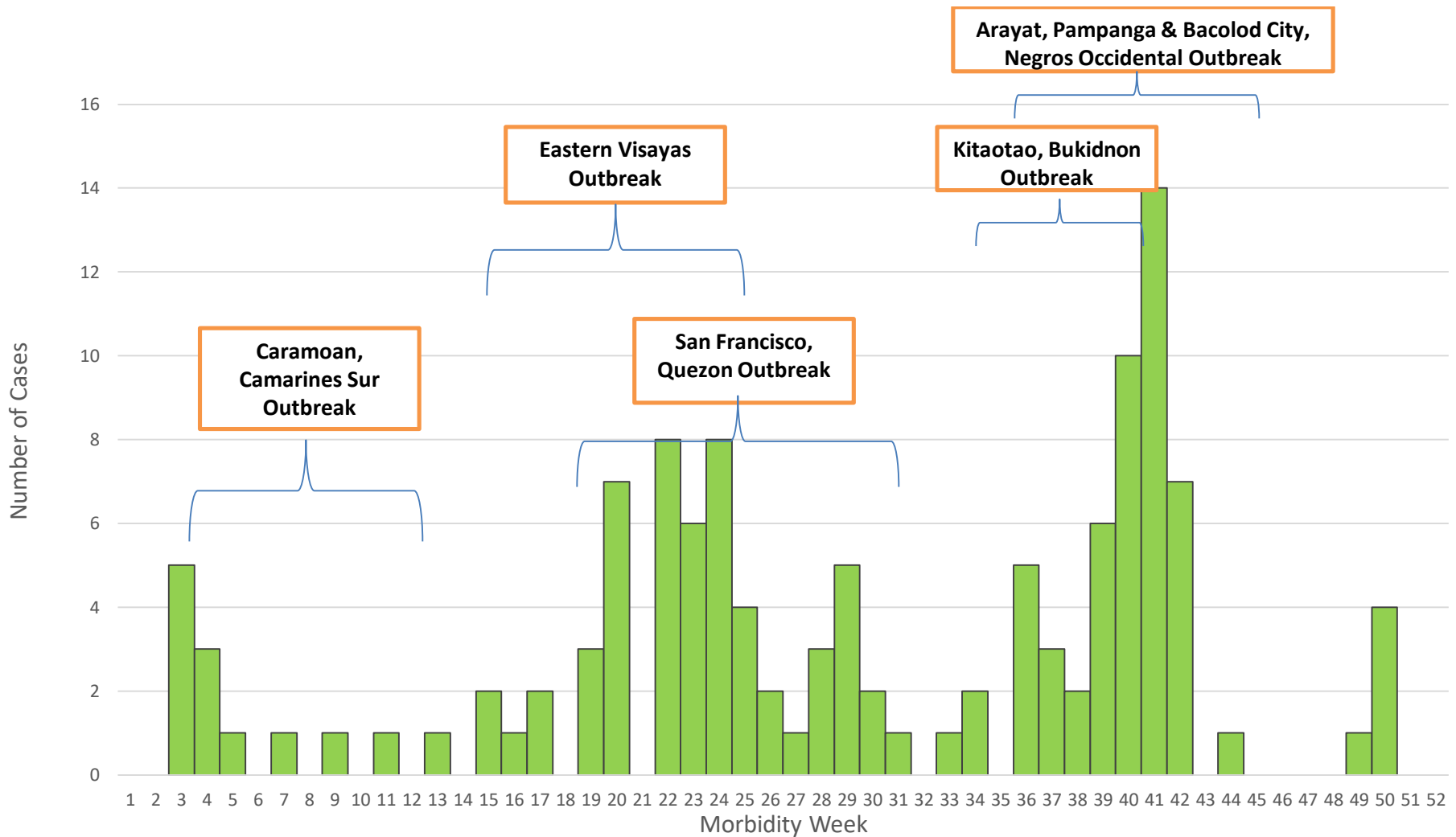
**Fig. 2 Confirmed Cholera Cases (n=124)  
Philippines, 2016**

There were **6 laboratory confirmed cholera outbreak** events captured by Event-based Surveillance for 2016 from the following areas:

1. Caramoan, Camarines Sur (January)
2. Eastern Visayas: Samar, Leyte, Northern & Eastern Samar (April)
3. San Francisco, Quezon (May)
4. Kitaotao, Bukidnon (August)
5. Arayat, Pampanga (September)
6. Bacolod City (October)



# Fig. 3 Confirmed Cholera Cases by Onset of Illness (n=124) Philippines, 2016



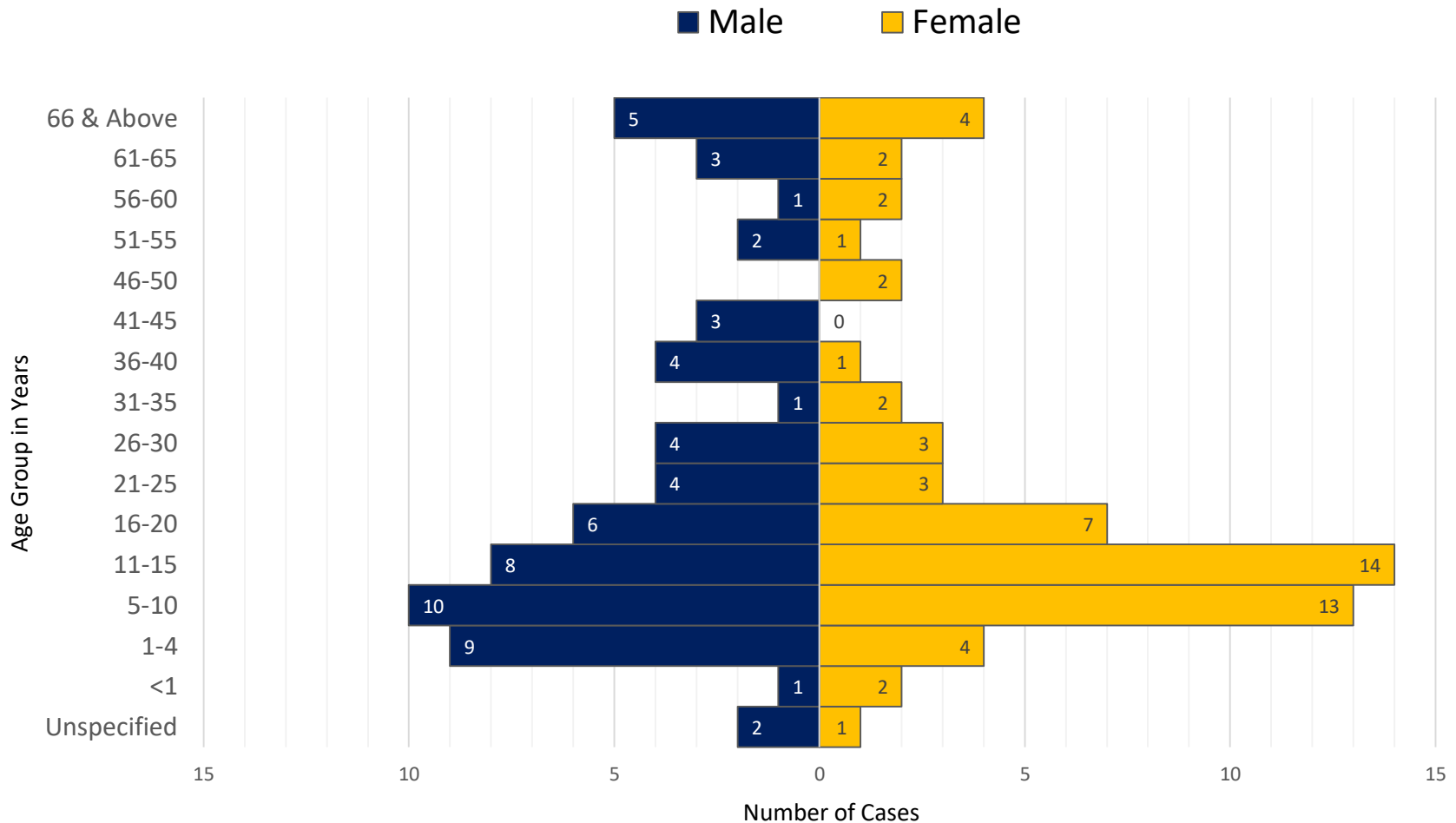
**Table 1. Confirmed Cholera Cases by Region  
Philippines, 2016 vs 2015**

Region	Cholera Cases		
	2016	2015	% Change
VIII	26	0	-
IV-A	21	3	600
VI	18	0	-
I	16	0	-
V	12	0	-
III	11	0	-
X	8	0	-
ARMM	4	0	-
CARAGA	4	0	-
XI	2	0	-
CAR	2	0	-
II	0	0	-
MIMAROPA	0	0	-
VII	0	0	-
IX	0	0	-
XII	0	10	-100
NCR	0	5	-100
<b>PHILIPPINES</b>	<b>124</b>	<b>18</b>	<b>588.89</b>

- Confirmed cholera cases is **588.89% higher compared** to the same time period last year (18 cases).
- **Top 5 Regions** with the most confirmed cases were the following: **Region 8 (21%), Region 4A (17%), Region 6 (15%), Region 1 (13%) and Region 5 (10%).**



**Fig. 4 Confirmed Cholera Cases by Age Group and Sex (n=124)  
Philippines, 2016**



- Median age of confirmed cases was **14 years old** (age range: less than 1 month to 80 years).
- Further, **19%** were aged **5 to 10 years old** while **18%** were **1 to 4 years old**.
- A little more than half (**51%**) of confirmed cases were **males** while **49%** were **females**.

- A total of **637 samples** were referred for testing. Of these, **124 (19.47% ) were laboratory confirmed cholera.**
- All of these confirmed cases were alive.

**Table 2. Identified Organisms among Confirmed Cholera Cases (n=124)  
Philippines, 2016**

Type of Organism	Cases (Percentage)
<i>Vibrio cholerae</i> Ogawa Biotype El Tor	69 (56%)
<i>Vibrio cholerae</i> Ogawa	43 (35%)
<i>Vibrio cholerae</i> 01	4 (3%)
<i>Vibrio cholerae</i> Inaba	3 (2%)
<i>Vibrio cholerae</i>	2 (2%)
<i>Vibrio cholerae</i> 0139	2 (2%)
<i>Vibrio cholerae</i> Non-01/Non-0139	1 (1%)





# Summary of Actions Taken

	Local	Regional & Central
<b>Case management and referral</b>	<ul style="list-style-type: none"> <li>• Done at the hospitals and rural health units.</li> </ul>	
<b>Case notification and report</b>	<ul style="list-style-type: none"> <li>• Made line listing of cases forwarded and reported to the next higher level.</li> </ul>	
<b>Outbreak investigation</b>	<ul style="list-style-type: none"> <li>• Conducted initial investigation in the affected community.</li> <li>• Assisted in epidemiologic investigation of the DOH Regional and Central office</li> <li>• Assisted in the collection of human (rectal swab, stool) and environmental (water) samples.</li> <li>• Capable provinces (i.e Quezon Province) conducted laboratory testing of water samples thru the use of Collilert machine.</li> <li>• Conducted records review and active case finding.</li> <li>• Random inspection of water refilling stations.</li> <li>• Continuous surveillance of diarrhea cases.</li> </ul>	<ul style="list-style-type: none"> <li>• FETP teams deployed in the provinces for epidemiologic investigation.</li> <li>• Facilitated collection of specimens (human &amp; environmental).</li> <li>• Augmented needed Carrie &amp; Blair transport media and coordinated transport of specimens from the provinces to RITM.</li> <li>• Provided feedback of investigation results to the local government units (LGU).</li> </ul>

# Summary of Actions Taken

	Local	Regional & Central
Implementation of control measures	<ul style="list-style-type: none"><li>• Distributed drugs and other medical supplies (aquatabs, hyposol, chlorine granules).</li><li>• Distributed jerry cans.</li><li>• Conducted health education on safe water consumption</li><li>• Conducted barangay assembly regarding environmental health.</li></ul>	<ul style="list-style-type: none"><li>• Augmented drugs and other supplies needed by the LGU (i.e. medicines, aquatabs, hyposol, chlorine granules, jerry cans).</li><li>• Conducted community IEC (Information, Education &amp; Communication).</li></ul>



# • National Sustainable Sanitation Plan (NSSP)



Republic of the Philippines  
Department of Health  
OFFICE OF THE SECRETARY

June 25, 2010

ADMINISTRATIVE ORDER  
No. 2010-0021

SUBJECT: Sustainable Sanitation as a National Policy and a National Priority Program of the Department of Health (DOH)

## I. BACKGROUND AND RATIONALE

The Philippines has made fairly significant inroads in increasing access to basic sanitation and by 2015, the Department of Health projects that sanitation coverage will reach 88% of the population. However, in spite of these gains, sanitation problems and challenges continue to pervade the country: open defecation in pockets of low-income urban and rural communities; lack of appropriate sanitation facilities; improper hygiene behaviors; and low levels of coverage of urban wastewater management services (collection, treatment and disposal), which all lead to contamination of water sources and incidence of water-borne diseases and impact negatively on environmental health.

The WB-DOH-EMB pilot project in Sustainable Sanitation in East Asia (SuSEA, 2006-2010) has confirmed that sanitation remains a critical public health and environmental problem that needs to be addressed in a sustainable manner. Some of these findings are:

- access to basic sanitation in specific (target) communities is much lower than the national average, usually in low-income communities and those living on fragile environments, such as above water bodies, on isolated islands and remote inlands
- those without toilets defecate in the open fields, shorelines or along rivers
- While many of the households with pour flush toilets use septic tanks, but only a few have been desludged in the past 3 years
- most of the septage and wastewater flow to open canals, rivers and other water bodies
- a large number of communities do not have any visible drains

In the last 30 years, outside Metro Manila, only 9 municipal wastewater management systems throughout the country were developed and all of them continue to serve a miniscule part of the urban centers (between 1-3% of total population). As a result, domestic pollution is the highest contributor to the organic pollution in our waterways, and poorer communities, which are at significantly greater risk of sanitation-related diseases, have been systematically left out of service. Part of the slow progress in developing municipal sanitation systems has been the prohibitive costs of constructing and maintaining conventional centralized systems and low demand, leading to unsustainable services.

Open defecation, inconsistent hygiene practices, and low levels of investment sanitation and in wastewater management result in high negative externalities for communities, municipalities/cities and even, water resource basins. Acute gastroenteritis is the second leading cause of morbidity in the country, while soil-transmitted helminthiasis (STH) continue to be endemic in a number of municipalities, making the Philippines the country with the second highest rate of STH incidence in Asia.

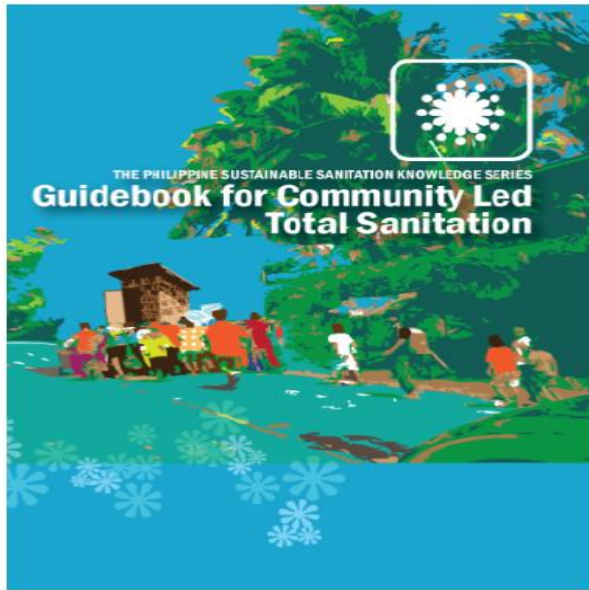
The Department of Health (DOH) have long recognized the distinctive link between sanitation and better health

Hygiene and sanitation is paramount in DOH mission to interrupt the spread of diseases and to stop the deaths caused by ill environments

The DOH recognizes the need for a new vision in sanitation, expressed in clearer policy and action programs



# Zero Open Defecation Program



- DOH provide capacity building to help the LGUs to build the competencies of CLTS Facilitators in planning and implementing interventions to address open defecation in communities through CLTS.





## Components of ZODP

- Demand creation (CLTS)
- Good Governance/Enabling environment
- Sanitation Marketing

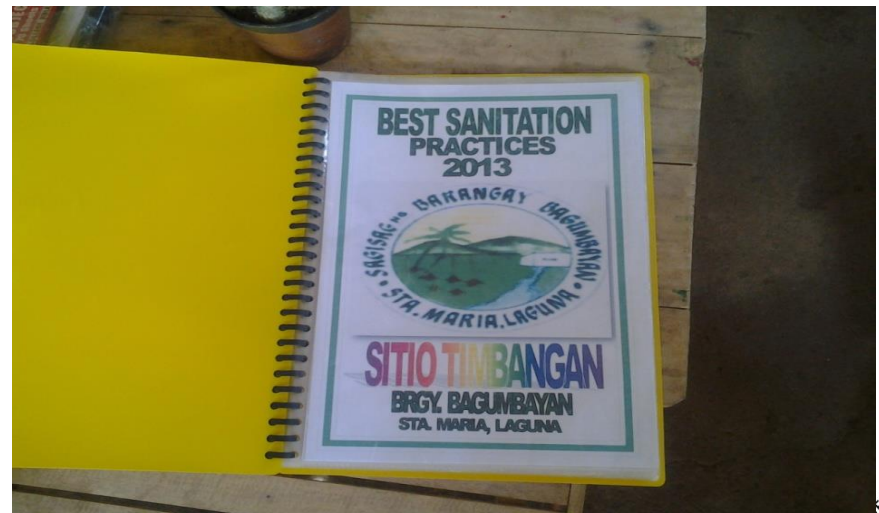


- Zero Open Defecation Program (ZODP)



ZOD declared Barangay

- WSP Pilot Areas – 77
- UNICEF – 925
- DOH NSBBSP - 611

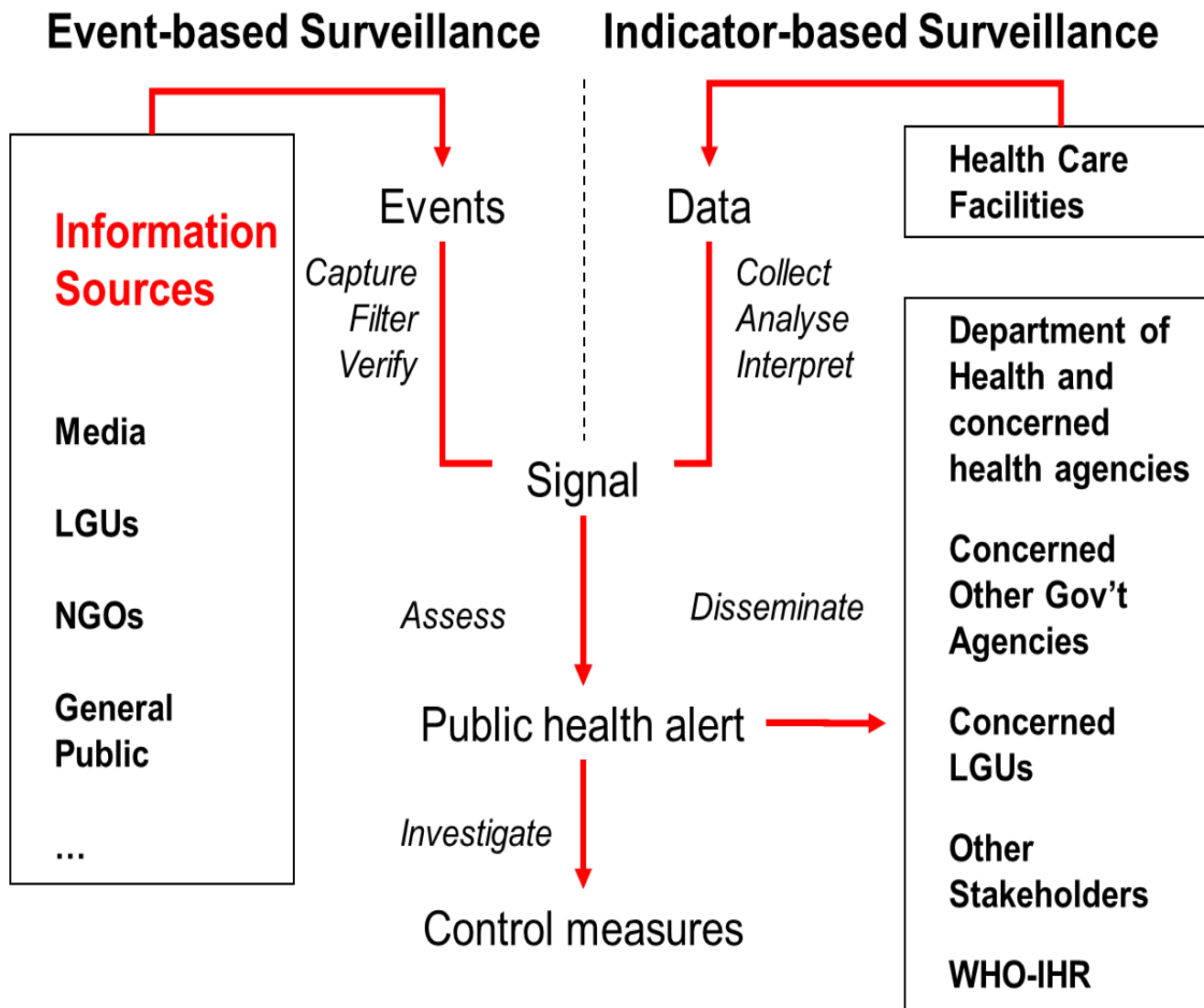


# Country Capacities

- Disease Surveillance
  - Epidemiology Bureau of the DOH, Program Manager
  - Regional Epidemiology & Surveillance Units
  - Regional Program Coordinators
  - Local : PESU, MESU



# Sources of Information and Processes in Surveillance





# Country Capacity

- NTD Initiatives
  - Food & Water-borne Program
  - Integrated approach
- Environmental Health Program
  - WASH
  - Regional Sanitary Engineers
  - Local Sanitary Inspectors



# Country Capacities

- Case Management
  - Health System : Devolve set-up
  - Varying capacities in Diagnosis and Treatment
  - Phil Health Agenda (3 Guarantees)
    - Primary Health Care Service package
    - Service Delivery Networks
    - Universal Coverage to Health Insurance
- Cholera Vaccination
  - OFW's going to endemic areas





Thank you