



Food and Waterborne Diseases

Food and waterborne illnesses are conditions caused by eating or drinking food or water that is contaminated by microorganisms or the toxins they produce. It typically causes gastrointestinal symptoms such as abdominal pain, nausea, vomiting, and diarrhea. Exposure to a variety of pathogens in water and food causes diarrheal disease. The mode of transmission is fecal-oral route.

I. Acute Bloody Diarrhea

Trend in the Philippines

A total of 1,720 acute bloody diarrhea cases were reported nationwide from January 1 to February 4, 2017. This is 19.20% higher compared to the same time period last year (1,443) (Table 1). There were 8 reported deaths (CFR=0.47%) (Table 2).

Geographical Distribution

Most of the reported cases were from the following regions: Region VII (54.13%), CARAGA (8.14%), CAR (7.38%), Region IX (6.28%), and Region X (5.58%) (Fig.2 & Table 2).

Profile of Cases

Ages of cases ranged from less than 1 month to 88 years old (median= 15 years). Majority of cases were female (50.1%). The most affected age group were from less than 1 year (47%) (Fig.3).

Further Analysis

A total of 894 (52%) samples were referred for testing. Of these, 782 (87%) were laboratory confirmed with different organisms. The top organisms identified were *entamoeba histolytica* (89.3%), *trophozoites* (3.2%), and *escherichia coli* (2.8%).

Table 2. Acute Bloody Diarrhea Cases & Deaths
Philippines, 2017* vs 2016

Region	Cases			Deaths			
	2017	2016	% Change	2017	CFR (%)	2016	CFR (%)
I	1	11	↓ -90.91	0	0.00	0	0.00
II	58	163	↓ -64.42	0	0.00	0	0.00
III	19	34	↓ -44.12	0	0.00	0	0.00
IV-A	45	23	↑ 95.65	1	2.22	0	0.00
MIMAROPA	5	8	↓ -37.50	0	0.00	0	0.00
V	22	1	↑ 2100.00	0	0.00	0	0.00
VI	3	6	↓ -50.00	0	0.00	0	0.00
VII	931	530	↑ 75.66	4	0.43	6	1.13
VIII	50	65	↓ -23.08	0	0.00	0	0.00
IX	108	92	↑ 17.39	2	1.85	1	1.09
X	96	70	↑ 37.14	0	0.00	0	0.00
XI	60	21	↑ 185.71	1	1.67	0	0.00
XII	32	36	↓ -11.11	0	0.00	0	0.00
ARMM	10	10	→ 0.00	0	0.00	0	0.00
CAR	127	199	↓ -36.18	0	0.00	0	0.00
CARAGA	140	148	↓ -5.41	0	0.00	0	0.00
NCR	13	26	↓ -50.00	0	0.00	0	0.00
Philippines	1720	1443	↑ 19.20	8	0.47	7	0.49

Table 1. Food & Waterborne Diseases
Philippines, 2017* vs 2016

FOOD/WATER-BORNE DISEASES	2017			2016	% Difference *2017 vs 2016
	Cases	Deaths	CFR (%)	Cases	
Acute Bloody Diarrhea	1,720	8	0.47	1,443	↑ 19.20
Confirmed Cholera	3	0	0.00	9	↓ -66.67
Confirmed Rotavirus	38	0	0.00	112	↓ -66.07
Hepatitis A	45	0	0.00	70	↓ -35.71
Typhoid	2,141	4	0.19	3,297	↓ -35.06

Fig. 1 Acute Bloody Diarrhea Cases by Morbidity Week
Philippines, as of February 4, 2017
2016 vs 2017*

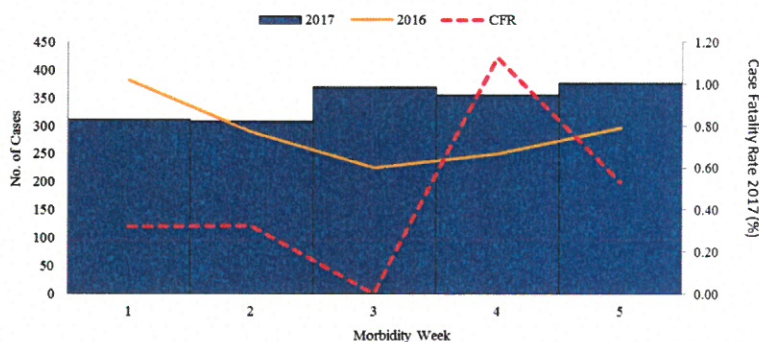


Fig. 2 Acute Bloody Diarrhea Cases by Region and Outcome (N=1,720)
Philippines, as of February 4, 2017

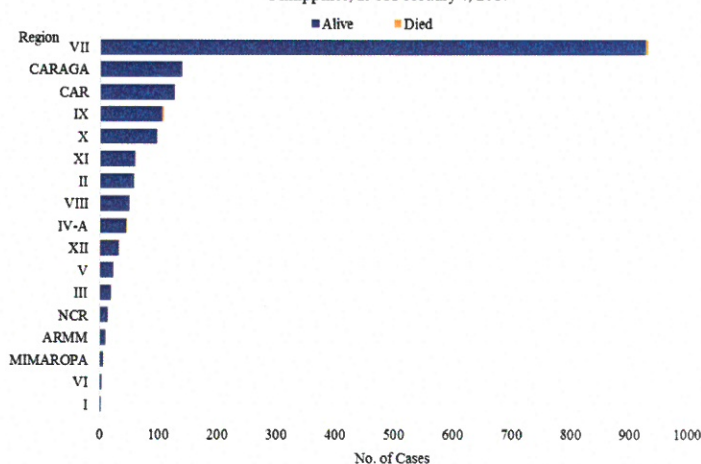
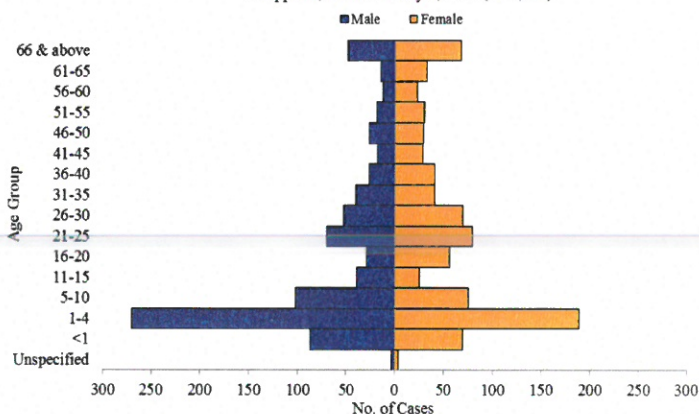


Fig. 3 Acute Bloody Diarrhea Cases by Age Group and Sex
Philippines, as of February 4, 2017 (N=1,720)





II. Cholera

Trend in the Philippines

A total of 278 reported cholera cases nationwide from January 1 to February 4, 2017. Among which, 4 deaths were reported (CFR=1.44%). Of the reported cases, 3 (1.08%) cases were laboratory confirmed cholera, no deaths reported. This is 66.67% lower compared to the same time period last year (9) (Table 1).

Geographical Distribution

Confirmed cases were from the following regions: Region VII (67%), and Region XI (33%) (Fig.5 and Table 3).

Profile of Cases

Ages of confirmed cases ranged from 4 to 13 years old (median= 12 years). Majority of the confirmed cases were female (67%). The mostly affected age group from the confirmed cases were from 11 to 15 years (67%) (Fig.6).

Further Analysis

A total of 7 (3%) samples were referred for testing. Of these, 3 (43%) were laboratory confirmed for *vibrio cholerae*. The organisms identified among confirmed cases were *vibrio cholerae* (67%), and *vibrio cholerae* *ogawa biotype el tor* (33%) (Table 3).

Table 3. Confirmed Cholera Cases & Deaths by Region
Philippines, 2017* vs 2016

Region	Cases			Deaths			
	2017	2016	% Change	2017	CFR (%)	2016	CFR (%)
I	0	0	⇒ 0.00	0	0.00	0	0.00
II	0	0	⇒ 0.00	0	0.00	0	0.00
III	0	0	⇒ 0.00	0	0.00	0	0.00
IV-A	0	8	↓ -800.00	0	0.00	0	0.00
MIMAROPA	0	0	⇒ 0.00	0	0.00	0	0.00
V	0	1	↓ -100.00	0	0.00	0	0.00
VI	0	0	⇒ 0.00	0	0.00	0	0.00
VII	2	0	↑ 200.00	0	0.00	0	0.00
VIII	0	0	⇒ 0.00	0	0.00	0	0.00
IX	0	0	⇒ 0.00	0	0.00	0	0.00
X	0	0	⇒ 0.00	0	0.00	0	0.00
XI	1	0	↑ 100.00	0	0.00	0	0.00
XII	0	0	⇒ 0.00	0	0.00	0	0.00
ARMM	0	0	⇒ 0.00	0	0.00	0	0.00
CAR	0	0	⇒ 0.00	0	0.00	0	0.00
CARAGA	0	0	⇒ 0.00	0	0.00	0	0.00
NCR	0	0	⇒ 0.00	0	0.00	0	0.00
Philippines	3	9	↓ -66.67	0	0.00	0	0.00

Fig. 4 Cholera Cases by Morbidity Week and Case Classification
Philippines, as of February 4, 2017
2016 vs 2017*

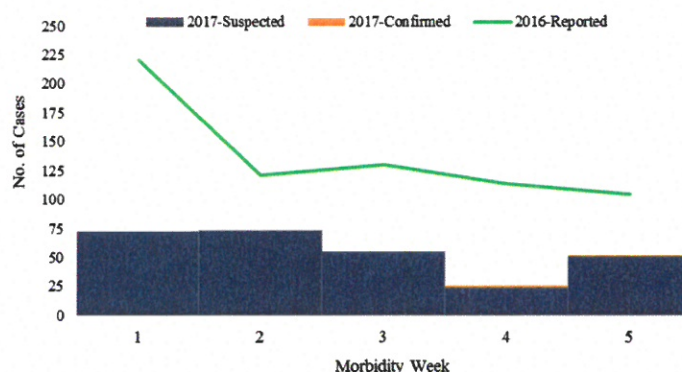


Fig. 5 Cholera Cases by Region and Case Classification (N=278)
Philippines, as of February 4, 2017

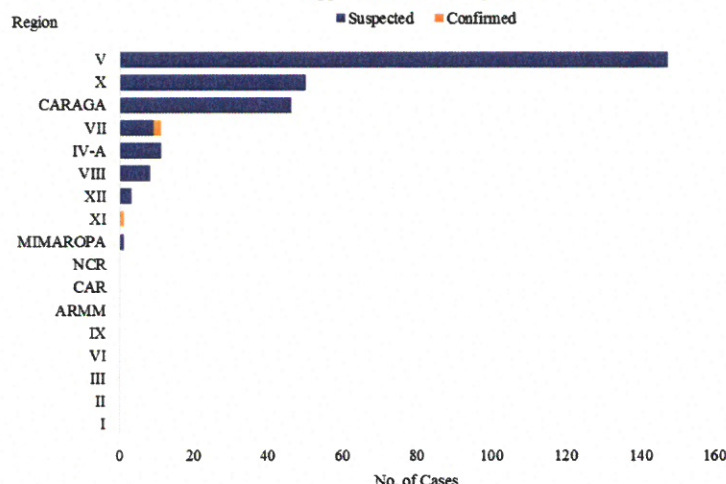


Fig. 6 Cholera Cases by Age Group, Sex and Case Classification (N=278)
Philippines, as of February 4, 2017

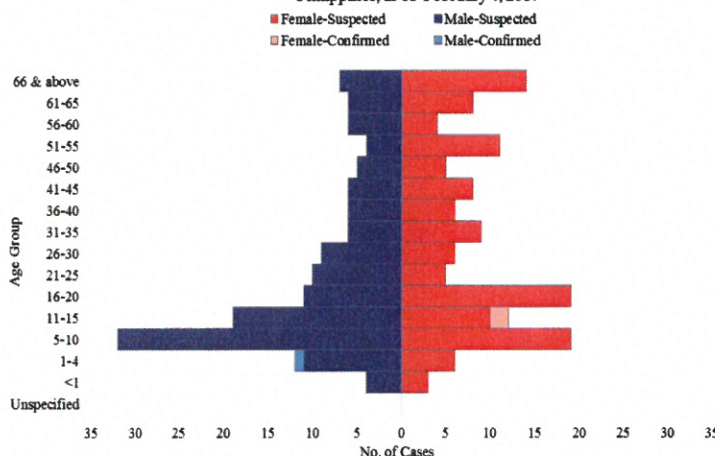


Table 4. Organisms in Cholera Cases (n=3)

Organism	Cases	%
<i>Vibrio Cholerae</i>	2	67
<i>Vibrio Cholerae</i> <i>Ogawa Biotype El Tor</i>	1	33
Total	3	100



III. Hepatitis A

Trend in the Philippines

A total of 45 Hepatitis A cases reported nationwide from January 1 to February 4, 2017 with no reported deaths. This is 35.71% lower compared to the same time period last year (70) (Table 1).

Geographical Distribution

Most of the cases were from the following regions: Region VI (22.2%), Region VII (17.8%), Region X, ARMM, and NCR (8.9%) (Fig.8 and Table 5).

Profile of Cases

Ages of cases ranged from 7 to 66 years old (median= 21 years). Majority of the confirmed cases were male (71%). The most affected age group were from 11 to 20 years (20%) (Fig.9).

Further Analysis

A total of 45 (100%) samples were reactive for IgM anti-HAV.

Table 5. Hepatitis A Cases & Deaths by Region
Philippines, 2017* vs 2016

Region	Cases			Deaths			
	2017	2016	% Change	2017	CFR (%)	2016	CFR (%)
I	0	1	↓-100.00	0	0.00	0	0.00
II	0	2	↓-200.00	0	0.00	0	0.00
III	2	3	↓-33.33	0	0.00	0	0.00
IV-A	3	1	↑200.00	0	0.00	0	0.00
MIMAROPA	0	4	↓-400.00	0	0.00	0	0.00
V	1	0	↑100.00	0	0.00	0	0.00
VI	10	11	↓-9.09	0	0.00	0	0.00
VII	8	14	↓-42.86	0	0.00	0	0.00
VIII	3	1	↑200.00	0	0.00	0	0.00
IX	3	13	↓-76.92	0	0.00	0	0.00
X	4	6	↓-33.33	0	0.00	0	0.00
XI	0	2	↓-200.00	0	0.00	0	0.00
XII	1	2	↓-50.00	0	0.00	0	0.00
ARMM	4	1	↑300.00	0	0.00	0	0.00
CAR	0	0	⇒ 0.00	0	0.00	0	0.00
CARAGA	2	0	↑200.00	0	0.00	0	0.00
NCR	4	9	↓-55.56	0	0.00	1	11.11
Philippines	45	70	↓-35.71	0	0.00	1	1.43

Fig. 7 Hepatitis A Cases by Morbidity Week
Philippines, as of February 4, 2017
2016 vs 2017*

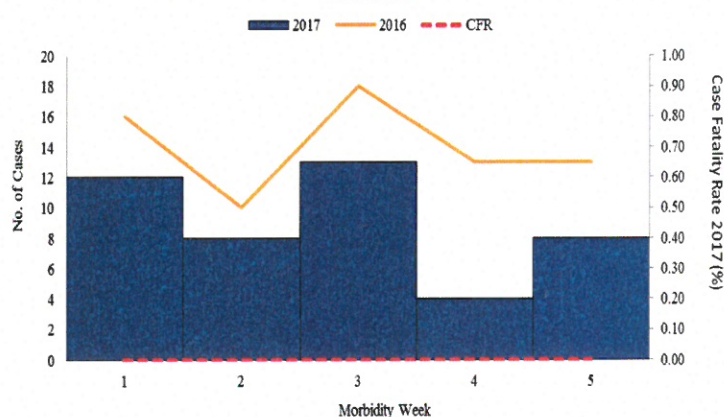


Fig. 8 Hepatitis A Cases by Region (N=45)
Philippines, as of February 4, 2017

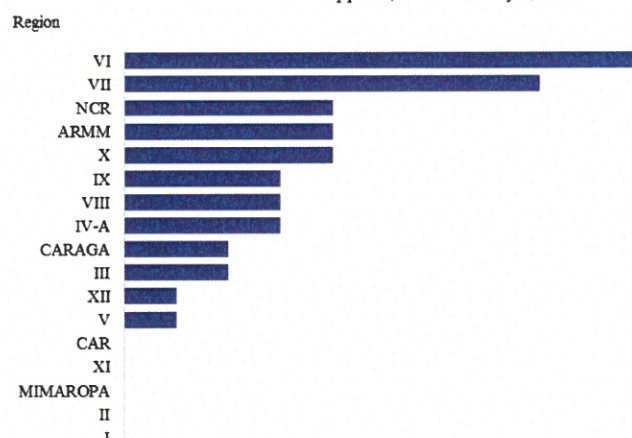
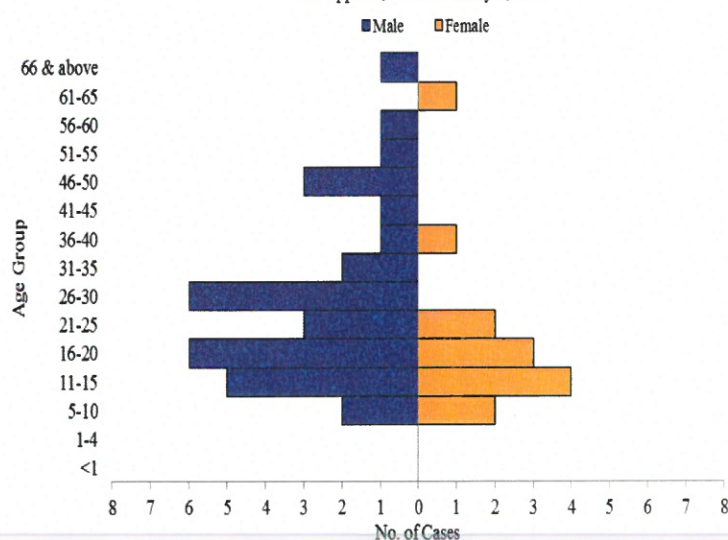


Fig. 9 Hepatitis A Cases by Age Group and Sex (N=45)
Philippines, as of February 4, 2017





IV. Rotavirus

Trend in the Philippines

A total of 205 reported Rotavirus cases nationwide from January 1 to February 4, 2017. Among which, 1 death was reported (CFR=0.49%). Of the reported cases, 38 (18.54%) cases were laboratory confirmed rotavirus, no deaths reported. This is 66% lower compared to the same time period last year (112) (Table 6).

Geographical Distribution

Confirmed cases were from the following regions: Region I (39.47%), Region VI (36.84%), NCR (21.05%) and Region XII (2.63) (Fig.11 and Table 6).

Profile of Cases

Ages of confirmed cases ranged from less than 1 month to 4 years old (median= 1 year). Majority of the confirmed cases were male (52.6%). Most of the cases belonged to 1 year old (42.11%) (Fig. 12).

Further Analysis

A total of 94 (46%) samples were tested. Of these, 38 (40%) were laboratory confirmed for rotavirus while 56 (60%) were negative.

Table 6. Confirmed Rotavirus Cases & Deaths by Region
Philippines, 2017* vs 2016

Region	Cases			Deaths			
	2017	2016	% Change	2017	CFR (%)	2016	CFR (%)
I	15	10	↑50.00	0	0.00	0	0.00
II	0	0	⇒0.00	0	0.00	0	0.00
III	0	0	⇒0.00	0	0.00	0	0.00
IV-A	0	0	⇒0.00	0	0.00	0	0.00
MIMAROPA	0	0	⇒0.00	0	0.00	0	0.00
V	0	0	⇒0.00	0	0.00	0	0.00
VI	14	29	↓51.72	0	0.00	0	0.00
VII	0	0	⇒0.00	0	0.00	0	0.00
VIII	0	0	⇒0.00	0	0.00	0	0.00
IX	0	0	⇒0.00	0	0.00	0	0.00
X	0	0	⇒0.00	0	0.00	0	0.00
XI	0	0	⇒0.00	0	0.00	0	0.00
XII	1	16	↓93.75	0	0.00	0	0.00
ARMM	0	18	↓1800.00	0	0.00	0	0.00
CAR	0	0	⇒0.00	0	0.00	0	0.00
CARAGA	0	22	↓2200.00	0	0.00	0	0.00
NCR	8	17	↓52.94	0	0.00	0	0.00
Philippines	38	112	↓66.07	0	0.00	0	0.00

Fig. 10 Confirmed Rotavirus Cases by Morbidity Week and Case Classification, Philippines, as of February 4, 2017
2016 vs 2017*

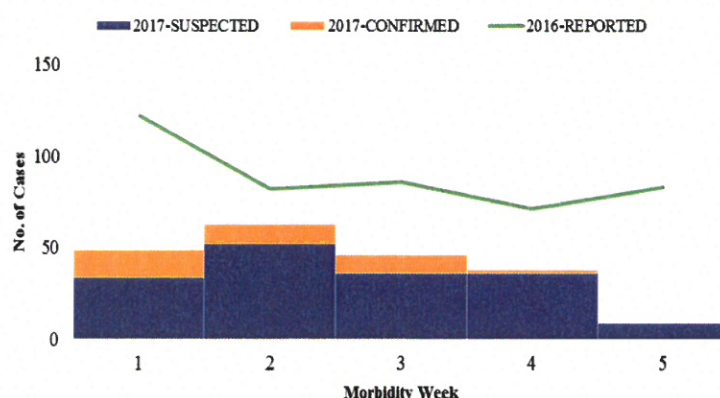


Fig. 11 Rotavirus Cases by Region and Case Classification (N=205)
Philippines, as of February 4, 2017

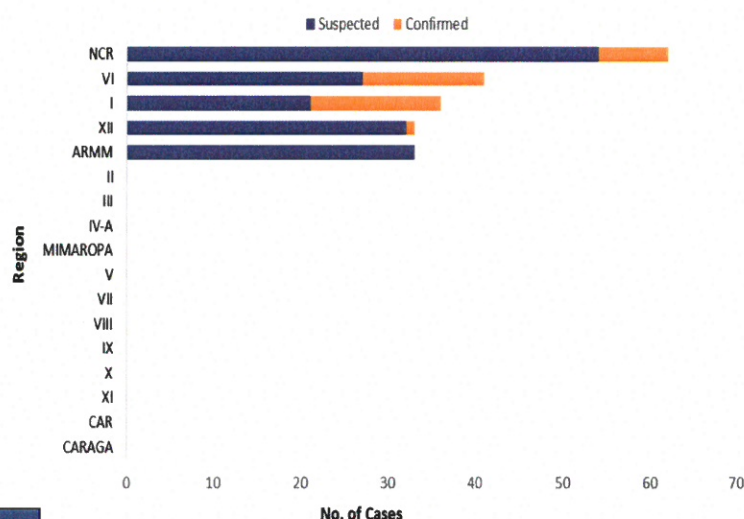
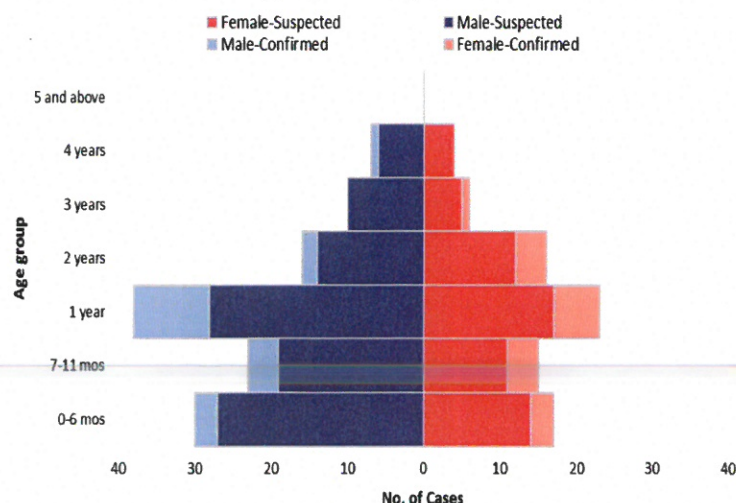


Fig. 12 Rotavirus Cases by Age group, Sex and Case Classification (N=205)
Philippines, as of February 4, 2017





V. Typhoid

Trend in the Philippines

A total of 2,141 reported typhoid cases were reported nationwide from January 1 to February 4, 2017 with 4 deaths (CFR=0.19%). This is 35.06% lower compared to the same time period last year (3,297) (Table 1).

Geographical Distribution

Most of the reported cases were from the following regions: Region X (18.50%), VI (11.58%), Region XII (10.42%), CAR (9.57%), and Region IX (7.52%). However, the top 5 regions with confirmed typhoid case were the following: Region VIII (18.75%), NCR (14.58%), Region 7 (12.50%), Region IVB (12.50%) and Region IVA (10.42%) (Fig.14 and Table 7).

Profile of Cases

Ages of cases ranged from less than 1 month to 97 years old (median= 18 years). Majority of cases were male (52.3%). The most affected age group were from 1 year to 25 years old (63%) (Fig.15).

Further Analysis

A total of 1,683 (79%) samples were referred for testing. Of these, 48 (3%) were tested with positive culture for salmonella typhi, 1,446 (86%) were positive for tubex, typhi dot and widal, and 189 (11%) were tested negative.

Table 7. Typhoid Cases & Deaths by Region
Philippines, 2017* vs 2016

Region	Cases			Deaths			
	2017	2016	% Change	2017	CFR (%)	2016	CFR (%)
I	110	181	↓-39.23	0	0.00	0	0.00
II	31	125	↓-75.20	1	3.23	0	0.00
III	41	155	↓-73.55	0	0.00	0	0.00
IV-A	140	368	↓-61.96	0	0.00	0	0.00
MIMAROPA	45	55	↓-18.18	1	2.22	0	0.00
V	61	45	↑35.56	0	0.00	0	0.00
VI	248	298	↓-16.78	0	0.00	0	0.00
VII	104	114	↓-8.77	0	0.00	2	1.75
VIII	45	90	↓-50.00	0	0.00	0	0.00
IX	161	240	↓-32.92	1	0.62	0	0.00
X	396	649	↓-38.98	0	0.00	0	0.00
XI	27	36	↓-25.00	0	0.00	0	0.00
XII	223	317	↓-29.65	1	0.45	0	0.00
ARMM	159	109	↑45.87	0	0.00	0	0.00
CAR	205	334	↓-38.62	0	0.00	0	0.00
CARAGA	102	152	↓-32.89	0	0.00	0	0.00
NCR	43	29	↑48.28	0	0.00	0	0.00
Philippines	2141	3297	↓-35.06	4	0.19	2	0.06

Fig. 13 Reported Typhoid Cases by Morbidity Week
Philippines, as of February 4, 2017
2016 vs 2017*

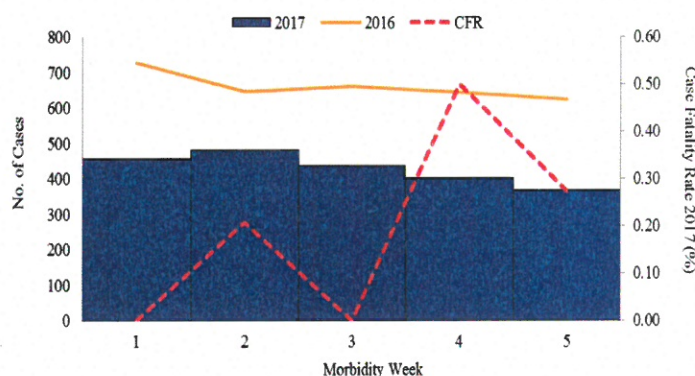


Fig. 14 Typhoid Case Classification Summary Report by Region
Philippines, as of February 4, 2017 (N=2,141)

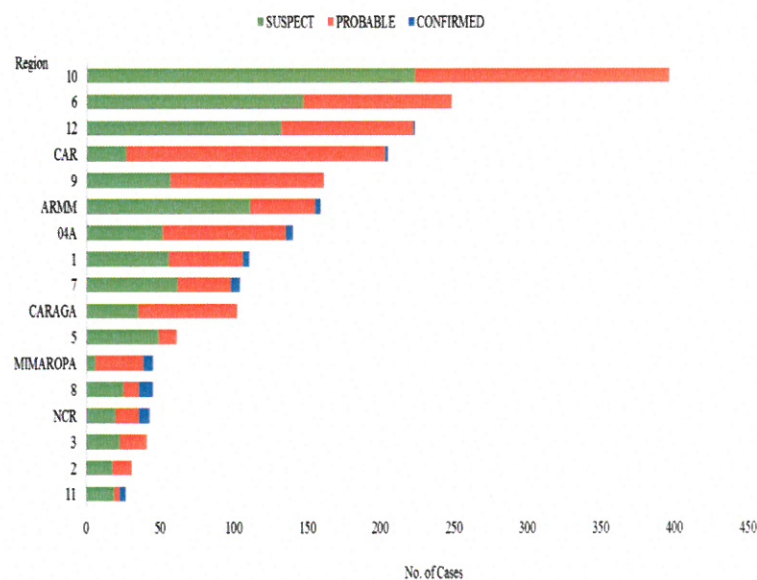
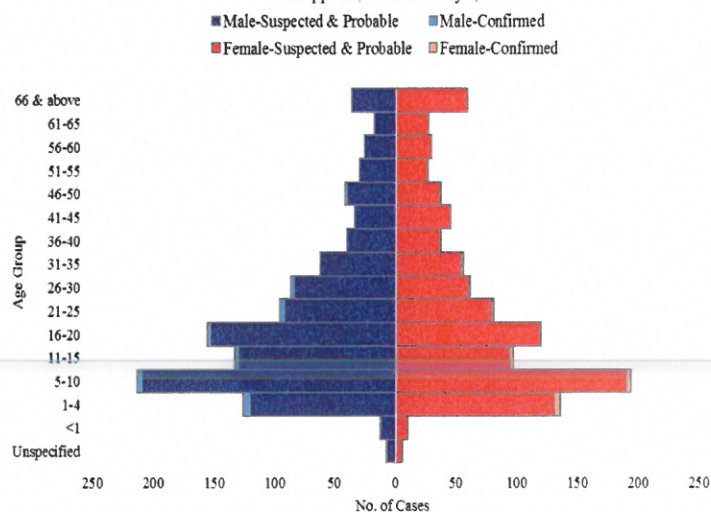


Fig. 15 Typhoid Cases by Age Group, Sex and Case Classification (N=2,141)
Philippines, as of February 4, 2017







Department of Health
Epidemiology Bureau
Public Health Surveillance Division


Food and Waterborne Diseases
(January 1 to February 4, 2017)


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