



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 8,169 acute bloody diarrhea cases were reported nationwide from January 1 to July 1, 2017. This is 4.18% higher compared to the same time period last year (7,841) (Table 1). There were 36 reported deaths (CFR=0.44%) (Table 2).

Geographical Distribution

Most of the reported cases were from the following regions: Region VII (42.01%), CARAGA (11.03%), CAR (10.59%), Region X (7.12%), and Region II (6.01%) (Fig.2 and Table 2).

Profile of Cases

Ages of cases ranged from less than 1 month to 99 years old (median= 14 years). Majority of cases were male (50.32%). The most affected age group were from 1 year to 4 years (26%) (Fig.3).

Further Analysis

A total of 4,767 (58%) samples were referred for testing. Of these, 4,124 (87%) were laboratory confirmed with different organisms. The top organisms identified were *entamoeba histolytica* (88%), *trophozoites* (4%), and *escherichia coli* (3%).

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

Region	Cases			Deaths			
	2017	2016	% Change	2017	CFR (%)	2016	CFR (%)
I	61	38	↑ 60.53	0	0.00	0	0.00
II	491	694	↓ -29.25	0	0.00	0	0.00
III	138	124	↑ 11.29	0	0.00	0	0.00
IV-A	301	128	↑ 135.16	2	0.66	1	0.78
MIMAROPA	68	54	↑ 25.93	0	0.00	0	0.00
V	52	8	↑ 550.00	0	0.00	0	0.00
VI	50	73	↓ -31.51	0	0.00	0	0.00
VII	3432	3173	↑ 8.16	28	0.82	32	1.01
VIII	328	248	↑ 32.26	1	0.30	0	0.00
IX	461	454	↑ 1.54	3	0.65	1	0.22
X	582	375	↑ 55.20	0	0.00	0	0.00
XI	158	95	↑ 66.32	2	1.27	2	2.11
XII	147	256	↓ -42.58	0	0.00	0	0.00
ARMM	66	85	↓ -22.35	0	0.00	1	1.18
CAR	865	1044	↓ -17.15	0	0.00	0	0.00
CRG	901	766	↑ 17.62	0	0.00	0	0.00
NCR	68	226	↓ -69.91	0	0.00	0	0.00
Philippines	8169	7841	↑ 4.18	36	0.44	37	0.47

Case counts reported here do NOT represent the final number and are subject to change after inclusion of delayed reports and review of cases.

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	8,169	36	0.44	7,841	↑ 4.18
Confirmed Cholera	58	0	0.00	56	↑ 3.57
Confirmed Rotavirus	879	0	0.00	1039	↓ -15.40
Hepatitis A	239	1	0.42	406	↓ -41.13
Typhoid	9,472	17	0.18	15,522	↓ -38.98

Fig. 1 Acute Bloody Diarrhea Cases by Morbidity Week
Philippines, January 1-July 1, 2017
2016 vs 2017*

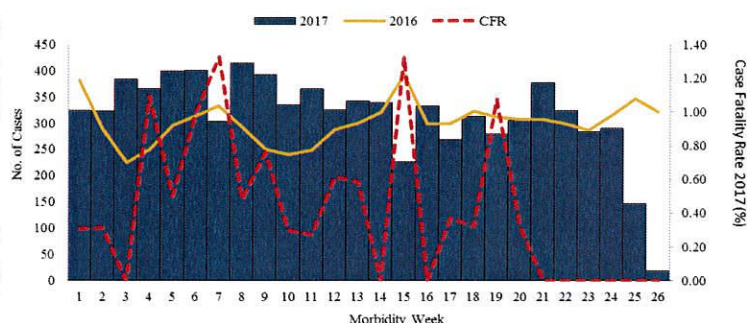


Fig. 2 Acute Bloody Diarrhea Cases by Region and Outcome (N=8,169)
Philippines, January 1- July 1, 2017

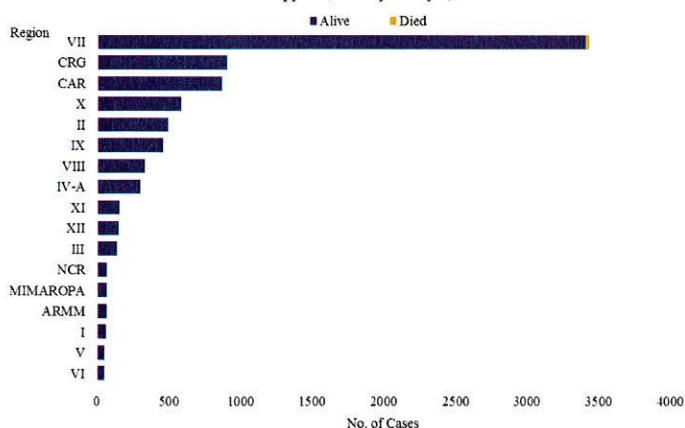
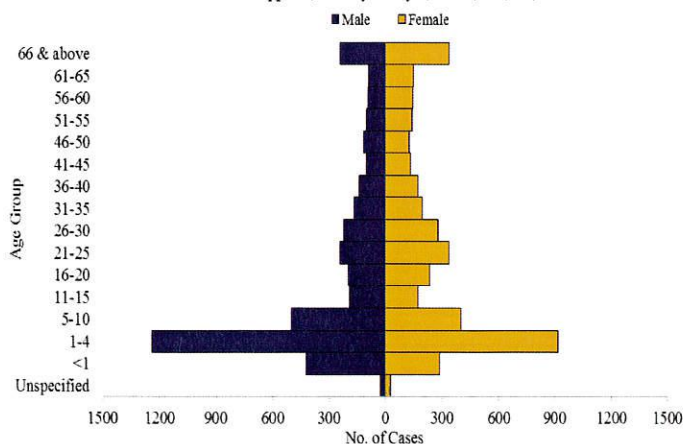


Fig. 3 Acute Bloody Diarrhea Cases by Age Group and Sex
Philippines, January 1-July 1, 2017 (N=8,169)





II. Cholera

Trend in the Philippines

A total of 1,834 reported cholera cases nationwide from January 1 to July 1, 2017. Among which, 12 deaths were reported (CFR=0.65%). Of the reported cases, 58 (3.2%) cases were laboratory confirmed cholera, no deaths reported (Table 1).

Geographical Distribution

Confirmed cases were from the following regions: Region IVA (36%), Region VII (26%), Region X (24%), Region V and XI (5%), and Region VI and IX (2%) (Fig.5 and Table 4).

Profile of Cases

Ages of confirmed cases ranged from 1 year to 70 years old (median= 16 years). Majority of the confirmed cases were male (57%). The most affected age group were from 1 year to 10 years (41%) (Fig.6).

Further Analysis

A total of 182 (10%) samples were referred for testing. Of these, 58 (32%) were laboratory confirmed for *vibrio cholerae*. The organisms identified among confirmed cases were *vibrio cholerae* *ogawa* biotype *el tor* (53%), *vibrio cholerae* (29%), and *vibrio cholerae* *ogawa* (17%) (Table 3).

Table 4. Confirmed Cholera Cases & Deaths by Region Philippines, 2017* vs 2016

Region	Cases			Deaths			
	2017	2016	% Change	2017	CFR(%)	2016	CFR(%)
I	0	5	↓100.00	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	21	10	↑110.00	0	0.00	0	0.00
MIMAROPA	0	0	→ 0.00	0	0.00	0	0.00
V	3	9	↓600.00	0	0.00	0	0.00
VI	1	0	↑100.00	0	0.00	0	0.00
VII	15	0	↑1500.00	0	0.00	0	0.00
VIII	0	24	↓2400.00	0	0.00	0	0.00
IX	1	0	→ 0.00	0	0.00	0	0.00
X	14	0	→ 0.00	0	0.00	0	0.00
XI	3	2	↑300.00	0	0.00	0	0.00
XII	0	0	→ 0.00	0	0.00	0	0.00
ARMM	0	4	↓100.00	0	0.00	0	0.00
CAR	0	2	↓100.00	0	0.00	0	0.00
CRG	0	0	→ 0.00	0	0.00	0	0.00
NCR	0	0	→ 0.00	0	0.00	0	0.00
Philippines	58	56	↑3.57	0	0.00	0	0.00

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Fig. 4 Cholera Cases by Morbidity Week and Case Classification Philippines, January 1-July 1, 2017 2016 vs 2017*

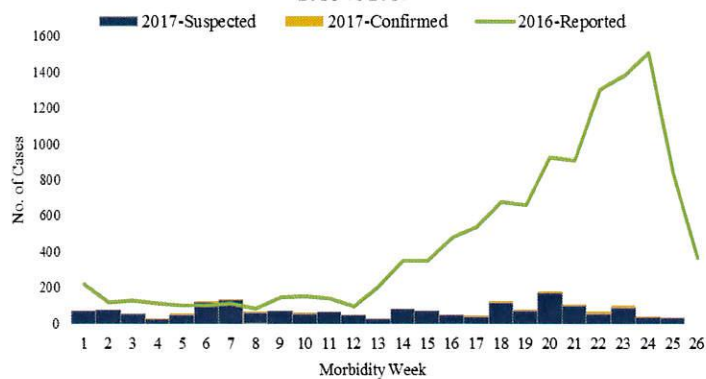


Fig. 5 Cholera Cases by Region and Case Classification (N=1,834) Philippines, January 1-July 1, 2017

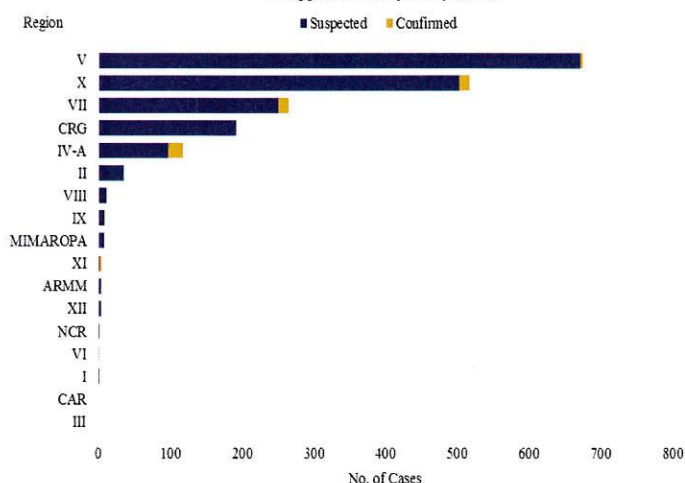


Fig. 6 Cholera Cases by Age Group, Sex and Case Classification (N=1,834) Philippines, January 1-July 1 2017

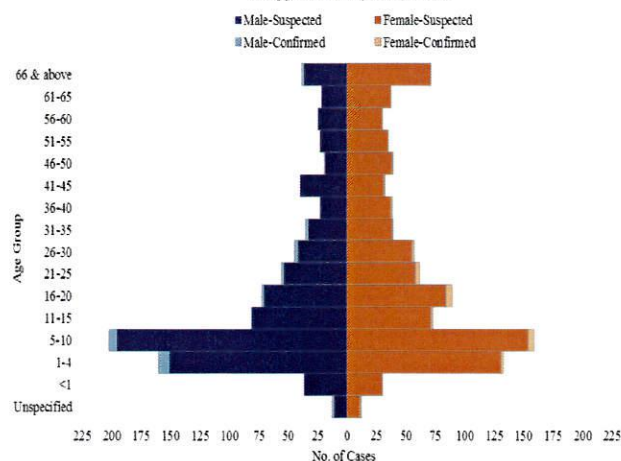


Table 3. Organisms in Cholera Cases (n=58)

Organism	Cases	%
<i>Vibrio Cholerae</i> <i>Ogawa</i> <i>Biotype</i> <i>El Tor</i>	31	53
<i>Vibrio Cholerae</i>	17	29
<i>Vibrio Cholerae</i> <i>Ogawa</i>	10	17
Total	58	100



III. Hepatitis A

Trend in the Philippines

A total of 239 Hepatitis A cases reported nationwide from January 1 to July 1, 2017. Among which, 1 death was reported (CFR=0.42). This is 41.13% lower compared to the same time period last year (406) (Table 1).

Geographical Distribution

Most of the cases were from the following regions: Region VII (23.4), Region VI (13.4%), NCR (11.3%), Region X (10.5%) and Region IX (6.7%) (Fig.8 and Table 5).

Profile of Cases

Ages of cases ranged from less than 1 month to 90 years old (median= 24 years). Majority of the confirmed cases were male (65%). The most affected age group were from 16 to 20 years (18%) (Fig.9).

Further Analysis

A total of 239 (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	12	5	↑140.00	0	0.00	0	0.00
II	1	5	↓400.00	0	0.00	0	0.00
III	11	13	↓15.38	1	9.09	0	0.00
IV-A	11	26	↓57.69	0	0.00	0	0.00
MIMAROPA	0	16	↓1600.00	0	0.00	0	0.00
V	7	8	↓12.50	0	0.00	0	0.00
VI	32	52	↓38.46	0	0.00	0	0.00
VII	56	123	↓54.47	0	0.00	1	0.81
VIII	3	10	↓70.00	0	0.00	0	0.00
IX	16	35	↓54.29	0	0.00	0	0.00
X	25	28	↓10.71	0	0.00	0	0.00
XI	3	7	↓57.14	0	0.00	0	0.00
XII	6	15	↓60.00	0	0.00	0	0.00
ARMM	12	19	↓36.84	0	0.00	0	0.00
CAR	7	5	↑40.00	0	0.00	0	0.00
CRG	10	7	↑42.86	0	0.00	0	0.00
NCR	27	32	↓15.63	0	0.00	1	3.13
Philippines	239	406	↓41.13	1	0.42	2	0.49

Fig. 7 Hepatitis A Cases by Morbidity Week
Philippines, January 1-July 1, 2017
2016 vs 2017*

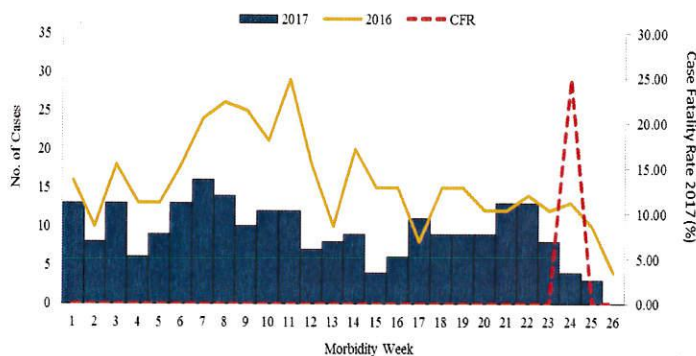


Fig. 8 Hepatitis A Cases by Region (N=239)
Philippines, January 1-July 1, 2017

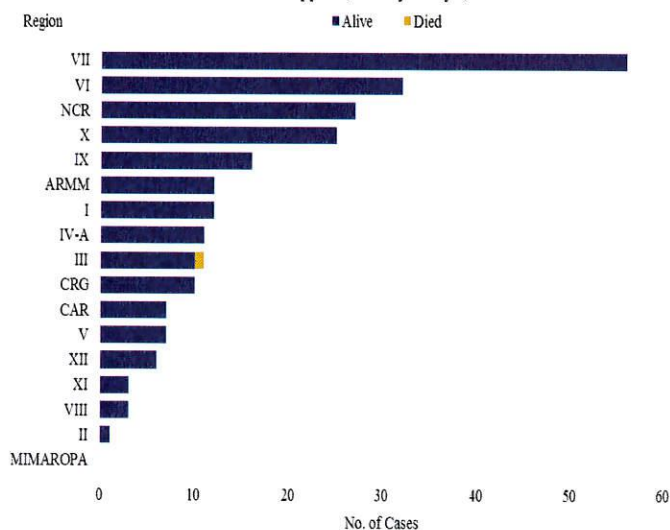
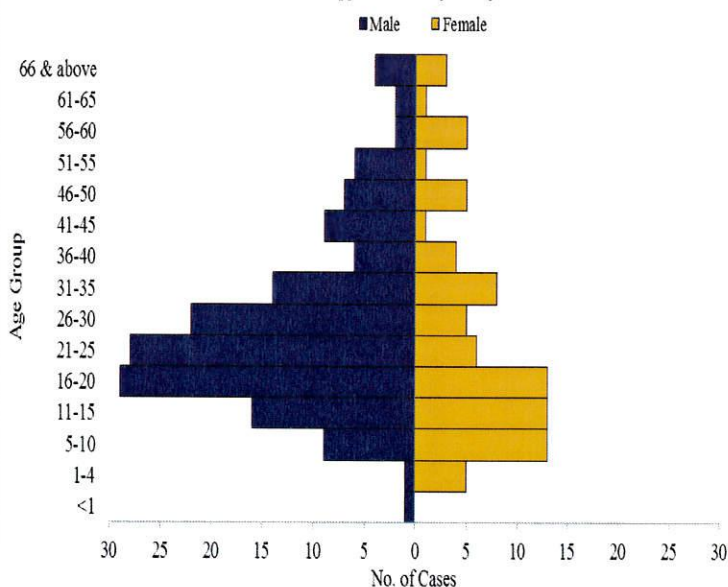


Fig. 9 Hepatitis A Cases by Age Group and Sex (N=239)
Philippines, January 1-July 1, 2017





IV. Rotavirus

Trend in the Philippines

A total of 2,262 reported rotavirus cases nationwide from January 1 to July 1, 2017. Among which, 15 deaths were reported (CFR=0.66%). Of the reported cases, 879 (38.86%) cases were laboratory confirmed rotavirus, no deaths reported. This is 15.4% lower compared to the same time period last year (892) (Table 6).

Geographical Distribution

Confirmed cases were mostly from the following regions: Region I (35.61%), Region VI (18.43%), CARAGA (12.29%), NCR (8.08%), Region XII and ARMM (7.62%) (Fig.11 and Table 6). Two confirmed cases were reported from Region XI and admitted in non-sentinel site.

Profile of Cases

Ages of confirmed cases ranged from less than 1 month to 7 years old (median= 1 year). Majority of the confirmed cases were male (57%). Most of the confirmed cases belonged to 1 year old (35.84%) (Fig. 12).

Further Analysis

A total of 1,851 (82%) samples were tested. Of these, 879 (47%) were laboratory confirmed for rotavirus, 679 (37%) were negative. There were 293 (16%) pending results.

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

Region	Cases			Deaths			
	2017	2016	% Change	2017	CFR (%)	2016	CFR (%)
I	313	229	36.68	0	0.00	2	0.87
II	0	0	0.00	0	0.00	0	0.00
III	1	1	0.00	0	0.00	0	0.00
IV-A	4	4	0.00	0	0.00	0	0.00
MMAROPA	53	6	783.33	0	0.00	0	0.00
V	29	23	26.09	0	0.00	0	0.00
VI	162	247	-34.41	0	0.00	0	0.00
VII	2	0	200.00	0	0.00	0	0.00
VIII	0	7	-100.00	0	0.00	0	0.00
IX	0	69	-100.00	0	0.00	0	0.00
X	0	0	0.00	0	0.00	0	0.00
XI	2	0	200.00	0	0.00	0	0.00
XII	67	122	-45.08	0	0.00	0	0.00
ARMM	67	168	-60.12	0	0.00	0	0.00
CAR	0	0	0.00	0	0.00	0	0.00
CARAGA	108	65	66.15	0	0.00	0	0.00
NCR	71	98	-27.55	0	0.00	0	0.00
Philippines	879	1039	-15.40	0	0.00	2	0.19

Fig. 10 Confirmed Rotavirus Cases by Morbidity Week and Case Classification.
Philippines, January 1- July 1, 2017
2017* vs 2016

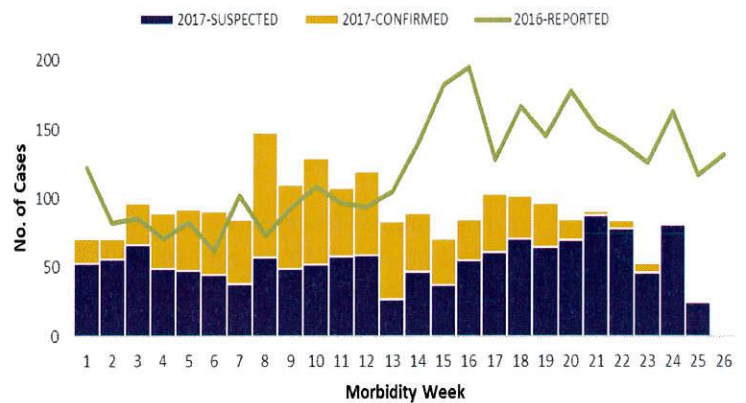


Fig. 11 Rotavirus Cases by Region and Case Classification (N=2,262)
Philippines, January 1- July 1, 2017

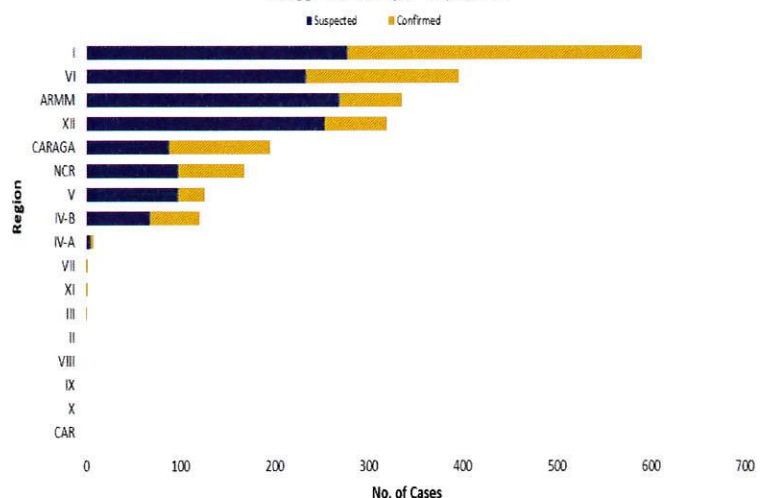
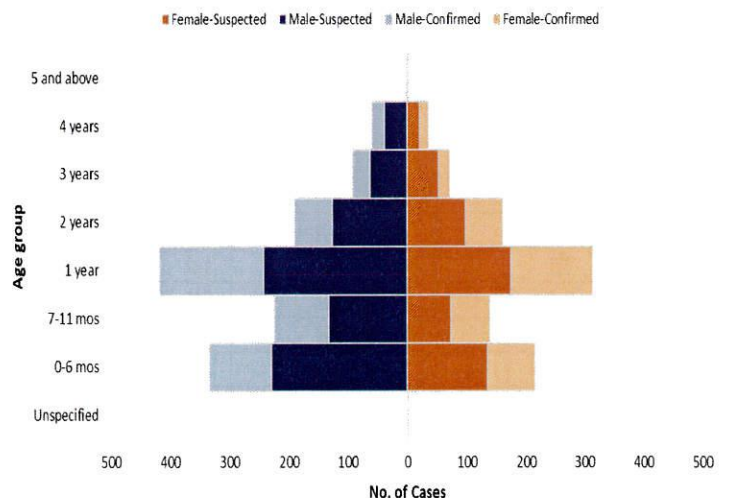


Fig. 12 Rotavirus Cases by Age group, Sex and Case Classification (N=2,262)
Philippines, January 1 - July 1, 2017





V. Typhoid

Trend in the Philippines

A total of 9,472 reported typhoid cases were reported nationwide from January 1 to July 1, 2017 with 17 deaths (CFR=0.18%). This is 38.98% lower compared to the same time period last year (15,522) (Table 1). Of the reported cases, 171 (1.81%) cases were confirmed typhoid.

Geographical Distribution

Most of the reported cases were from the following regions: Region X (20.75%), XII (10.88%), Region VI (9.57%), CAR (8.53%), and Region IVA (7.45%). However, the top 5 regions with confirmed typhoid case were the following: Region VIII (31.58%), Region VII (11.70%), Region X and NCR (10.53%) and Region IVA (8.77%) (Fig.14 and Table 7).

Profile of Cases

Ages of cases ranged from less than 1 month to 97 years old (median= 17 years). Majority of cases were male (52.67%). The most affected age group were from 5 to 10 years old (18.80%) (Fig.15).

Further Analysis

A total of 7,606 (80%) samples were referred for testing. Of these, 6,521 (86%) were positive for tubex, typhi dot, widal and RDT, 171 (2%) were tested with positive culture for salmonella typhi, and 914 (12%) 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	526	1,000	-47.40	0	0.00	0	0.00
II	243	363	-33.06	1	0.41	1	0.28
III	243	610	-60.16	0	0.00	0	0.00
IV-A	706	1,099	-35.76	0	0.00	1	0.09
MIMAROPA	174	385	-54.81	1	0.57	2	0.52
V	194	191	1.57	1	0.52	1	0.52
VI	906	1,341	-32.44	3	0.33	4	0.30
VII	551	608	-9.38	3	0.54	4	0.66
VIII	242	351	-31.05	2	0.83	0	0.00
IX	584	968	-39.67	2	0.34	1	0.10
X	1,965	2,817	-30.24	0	0.00	1	0.04
XI	114	151	-24.50	0	0.00	0	0.00
XII	1,031	2,147	-51.98	1	0.10	0	0.00
ARMM	520	794	-34.51	3	0.58	2	0.25
CAR	808	2,022	-60.04	0	0.00	2	0.10
CARAGA	437	481	-9.15	0	0.00	0	0.00
NCR	228	194	17.53	0	0.00	3	1.55
Philippines	9472	15522	-38.98	17	0.18	22	0.14

Case counts reported here do NOT represent the final number and are subject to change after inclusion of delayed reports and review of cases.

Fig. 13 Reported Typhoid Cases by Morbidity Week
Philippines, January 1- July 1, 2017
2016 vs 2017*

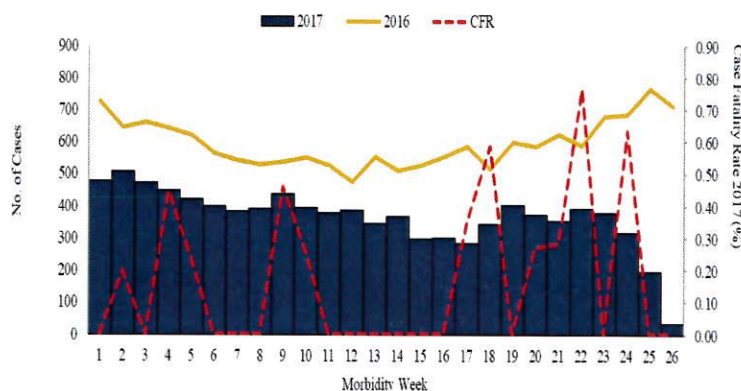


Fig. 14 Typhoid Cases by Region and Case Classification
Philippines, January 1 - July 1, 2017 (N=9,472)

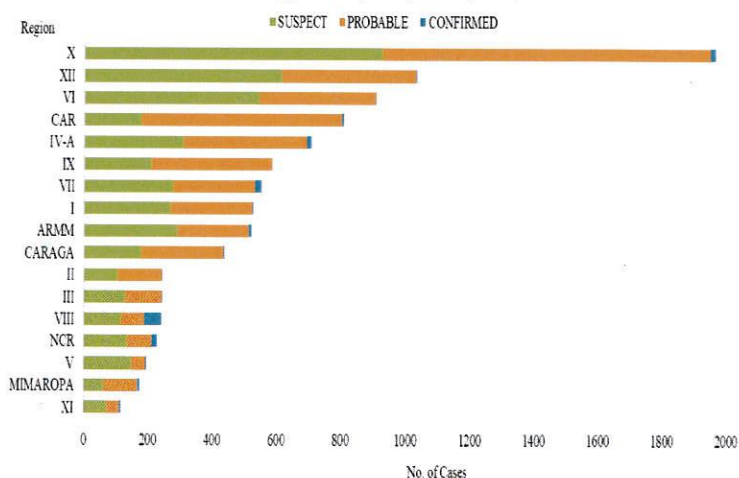
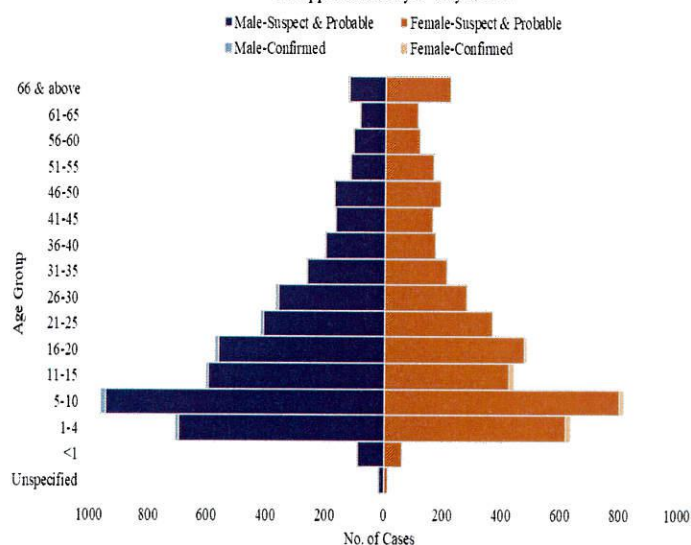


Fig. 15 Typhoid Cases by Age Group, Sex and Case Classification (N=9,472)
Philippines, January 1 - July 1, 2017







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Epidemiology Bureau
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Food and Waterborne Diseases
(January 1 to July 1, 2017)

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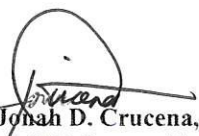

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