



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 6,701 acute bloody diarrhea cases were reported nationwide from January 1 to June 3, 2017. This is 1.99% higher compared to the same time period last year (6,570) (Table 1). There were 36 reported deaths (CFR=0.54%) (Table 2).

Geographical Distribution

Most of the reported cases were from the following regions: Region VII (43.86%), CAR (10.10%), CARAGA (9.52%), Region X (7.39%), and Region II (6%) (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 (50.34%). The most affected age group were from 1 year to 4 years (27%) (Fig.3).

Further Analysis

A total of 3,729 (56%) samples were referred for testing. Of these, 3,233 (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	50	32	↑56.25	0	0.00	0	0.00
II	402	602	↓33.22	0	0.00	0	0.00
III	121	116	↑4.31	0	0.00	0	0.00
IV-A	225	94	↑139.36	2	0.89	1	1.06
MIMAROPA	57	47	↑21.28	0	0.00	0	0.00
V	47	8	↑487.50	0	0.00	0	0.00
VI	36	50	↓28.00	0	0.00	0	0.00
VII	2939	2652	↑10.82	28	0.95	29	1.09
VIII	279	216	↑29.17	1	0.36	0	0.00
IX	382	381	→0.26	3	0.79	1	0.26
X	495	288	↑71.88	0	0.00	0	0.00
XI	139	85	↑63.53	2	1.44	2	2.35
XII	112	224	↓50.00	0	0.00	0	0.00
ARMM	44	65	↓32.31	0	0.00	0	0.00
CAR	677	867	↓21.91	0	0.00	0	0.00
CRG	638	660	↓3.33	0	0.00	0	0.00
NCR	58	183	↓68.31	0	0.00	0	0.00
Philippines	6701	6570	↑1.99	36	0.54	33	0.50

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	6,701	36	0.54	6,570	↑1.99
Confirmed Cholera	28	0	0.00	36	↓22.22
Confirmed Rotavirus	804	0	0.00	892	↓9.87
Hepatitis A	196	0	0.00	367	↓46.59
Typhoid	7,795	11	0.14	10,279	↓24.17

Fig. 1 Acute Bloody Diarrhea Cases by Morbidity Week
Philippines, as of June 3, 2017
2016 vs 2017*

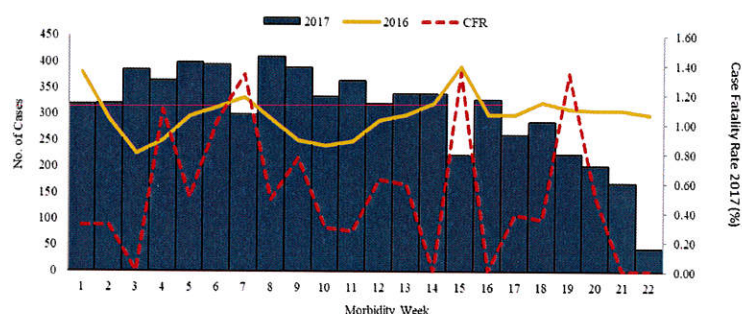


Fig. 2 Acute Bloody Diarrhea Cases by Region and Outcome (N=6,701)
Philippines, as of June 3, 2017

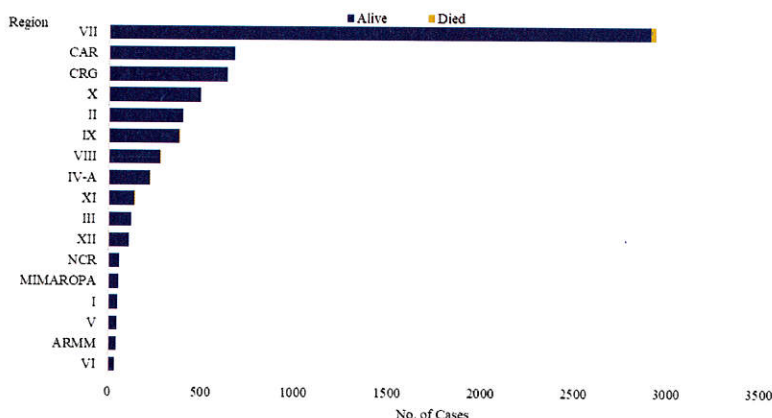
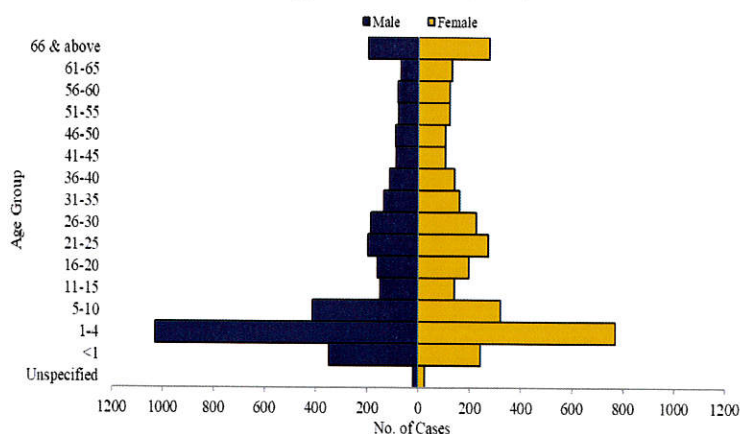


Fig. 3 Acute Bloody Diarrhea Cases by Age Group and Sex
Philippines, as of June 3, 2017 (N=6,701)





II. Cholera

Trend in the Philippines

A total of 1,539 reported cholera cases nationwide from January 1 to June 3, 2017. Among which, 10 deaths were reported (CFR=0.65%). Of the reported cases, 28 (1.8%) cases were laboratory confirmed cholera, no deaths reported (Table 1).

Geographical Distribution

Confirmed cases were from the following regions: Region X (46%), Region VII (36%), Region XI (11%), Region VI and IX (4%) (Fig.5 and Table 4).

Profile of Cases

Ages of confirmed cases ranged from 1 year to 70 years old (median= 5 years). Majority of the confirmed cases were male (61%). The most affected age group were from 1 year to 4 years (43%) (Fig.6).

Further Analysis

A total of 103 (7%) samples were referred for testing. Of these, 28 (27%) were laboratory confirmed for *vibrio cholerae*. The organisms identified among confirmed cases were *vibrio cholera ogawa biotype el tor* (39%), *vibrio cholera* (36%), and *vibrio cholera ogawa* (25%) (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	3	↓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	0	10	↓100.00	0	0.00	0	0.00
MIMAROPA	0	0	→ 0.00	0	0.00	0	0.00
V	0	5	↓500.00	0	0.00	0	0.00
VI	1	0	↑100.00	0	0.00	0	0.00
VII	10	0	↑1000.00	0	0.00	0	0.00
VIII	0	12	↓1200.00	0	0.00	0	0.00
IX	1	0	→ 0.00	0	0.00	0	0.00
X	13	0	→ 0.00	0	0.00	0	0.00
XI	3	0	↑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	28	36	↓22.22	0	0.00	0	0.00

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. 4 Cholera Cases by Morbidity Week and Case Classification
Philippines, as of June 3, 2017
2016 vs 2017*

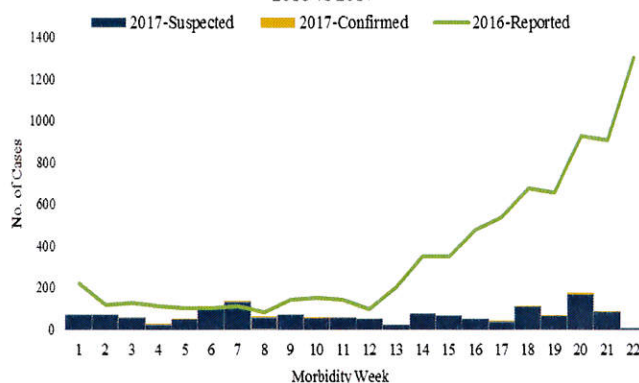


Fig. 5 Cholera Cases by Region and Case Classification (N=1,539)
Philippines, as of June 3, 2017

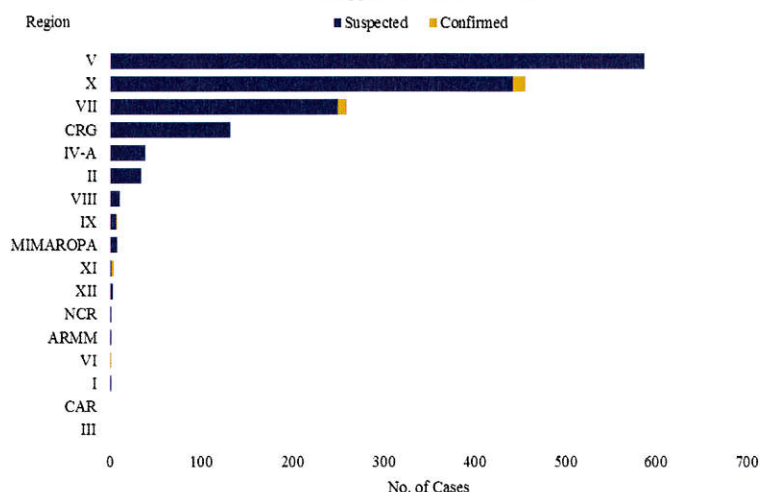


Fig. 6 Cholera Cases by Age Group, Sex and Case Classification (N=1,539)
Philippines, as of June 3, 2017

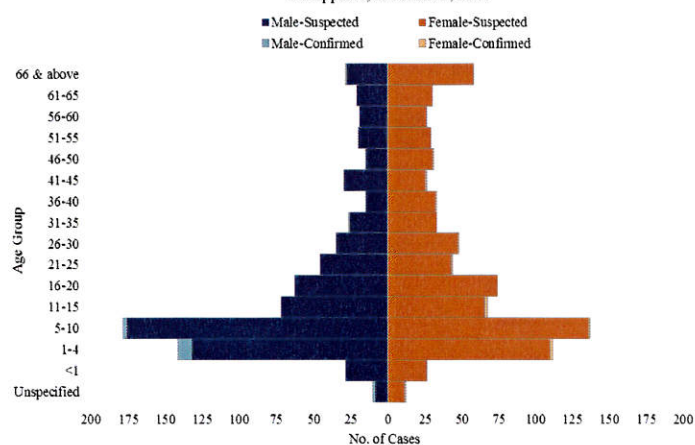


Table 3. Organisms in Cholera Cases (n=28)

Organism	Cases	%
<i>Vibrio Cholerae Ogawa Biotype El Tor</i>	11	39
<i>Vibrio Cholerae</i>	10	36
<i>Vibrio Cholerae Ogawa</i>	7	25
Total	28	100



III. Hepatitis A

Trend in the Philippines

A total of 196 Hepatitis A cases reported nationwide from January 1 to June 3, 2017 with no reported deaths. This is 46.59% lower compared to the same time period last year (367) (Table 1).

Geographical Distribution

Most of the cases were from the following regions: Region VII (18.9), Region VI (13.8%), Region X (12.2%), NCR (11.7%) and Region IX (6.1%) (Fig.8 and Table 5).

Profile of Cases

Ages of cases ranged from less than 1 month to 84 years old (median= 24 years). Majority of the confirmed cases were male (66%). The most affected age group were from 16 to 20 years (16%) (Fig.9).

Further Analysis

A total of 196 (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	9	5	↑80.00	0	0.00	0	0.00
II	1	3	↓200.00	0	0.00	0	0.00
III	10	11	↓9.09	0	0.00	0	0.00
IV-A	10	22	↓54.55	0	0.00	0	0.00
MIMAROPA	0	12	↓1200.00	0	0.00	0	0.00
V	7	7	→0.00	0	0.00	0	0.00
VI	27	47	↓42.55	0	0.00	0	0.00
VII	37	118	↓68.64	0	0.00	1	0.85
VIII	3	10	↓70.00	0	0.00	0	0.00
IX	12	32	↓62.50	0	0.00	0	0.00
X	24	24	→0.00	0	0.00	0	0.00
XI	2	7	↓71.43	0	0.00	0	0.00
XII	6	12	↓50.00	0	0.00	0	0.00
ARMM	11	17	↓35.29	0	0.00	0	0.00
CAR	5	3	↑66.67	0	0.00	0	0.00
CRG	9	6	↑50.00	0	0.00	0	0.00
NCR	23	31	↓25.81	0	0.00	1	3.23
Philippines	196	367	↓46.59	0	0.00	2	0.54

Fig. 7 Hepatitis A Cases by Morbidity Week
Philippines, as of June 3, 2017
2016 vs 2017*

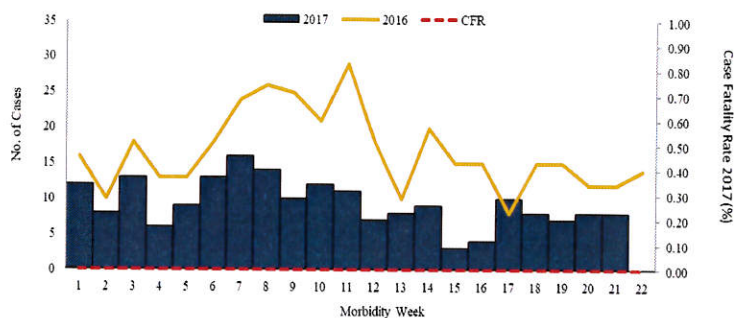


Fig. 8 Hepatitis A Cases by Region (N=196)
Philippines, as of June 3, 2017

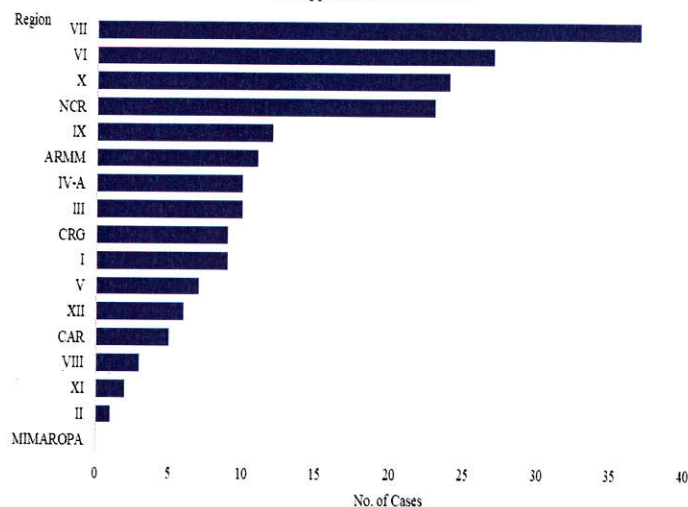
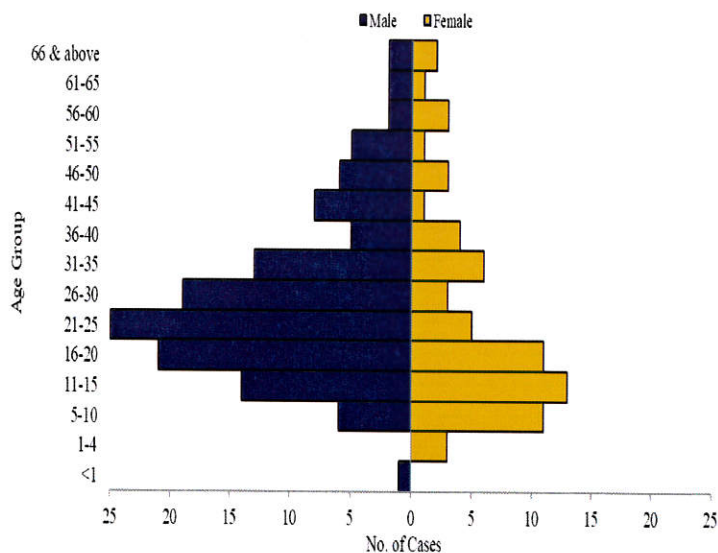


Fig. 9 Hepatitis A Cases by Age Group and Sex (N=196)
Philippines, as of June 3, 2017





IV. Rotavirus

Trend in the Philippines

A total of 1,890 reported rotavirus cases nationwide from January 1 to June 3, 2017. Among which, 14 deaths were reported (CFR=0.74%). Of the reported cases, 804 (42.54%) cases were laboratory confirmed rotavirus, no deaths reported. This is 9.9% lower compared to the same time period last year (892) (Table 6).

Geographical Distribution

Confirmed cases were mostly from the following regions: Region I (38.68%), Region VI (18.53%), CARAGA (9.45%), NCR (8.71%) and ARMM (7.96%) (Fig.11 and Table 6).

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 (56%). Most of the confirmed cases belonged to 1 year old (35.32%) (Fig. 12).

Further Analysis

A total of 1,556 (82%) samples were tested. Of these, 804 (52%) were laboratory confirmed for rotavirus, 596 (38%) were negative. There were 156 (10%) 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	311	203	▲ 53.20	0	0.00	2	0.99
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	40	2	▲ 1900.00	0	0.00	0	0.00
V	24	17	▲ 41.18	0	0.00	0	0.00
VI	149	193	▼ -22.80	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	65	▼ -100.00	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	63	115	▼ -45.22	0	0.00	0	0.00
ARMM	64	139	▼ -53.96	0	0.00	0	0.00
CAR	0	0	→ 0.00	0	0.00	0	0.00
CARAGA	76	58	▲ 31.03	0	0.00	0	0.00
NCR	70	95	▼ -26.32	0	0.00	0	0.00
Philippines	804	892	▼ -9.87	0	0.00	2	0.22

Fig. 10 Confirmed Rotavirus Cases by Morbidity Week and Case Classification, Philippines, as of June 3, 2017
2017* vs 2016

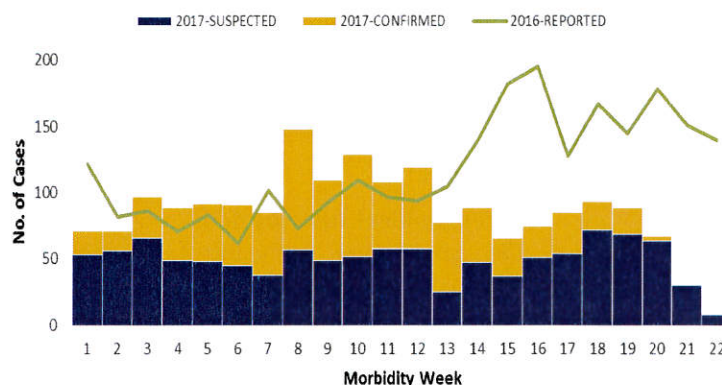


Fig. 11 Rotavirus Cases by Region and Case Classification (N=1,890) Philippines, as of June 3, 2017

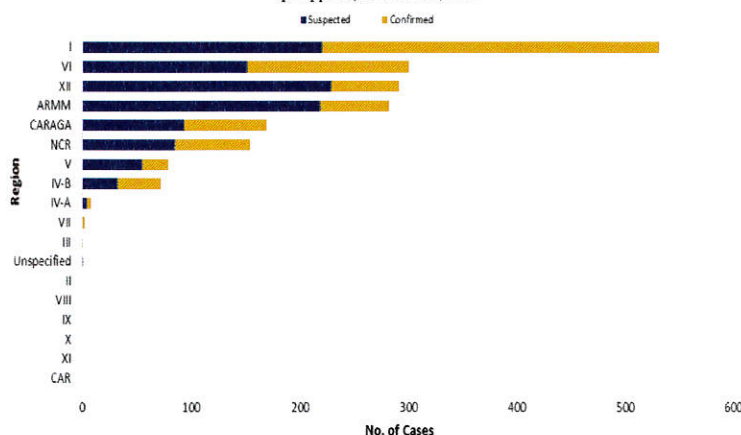
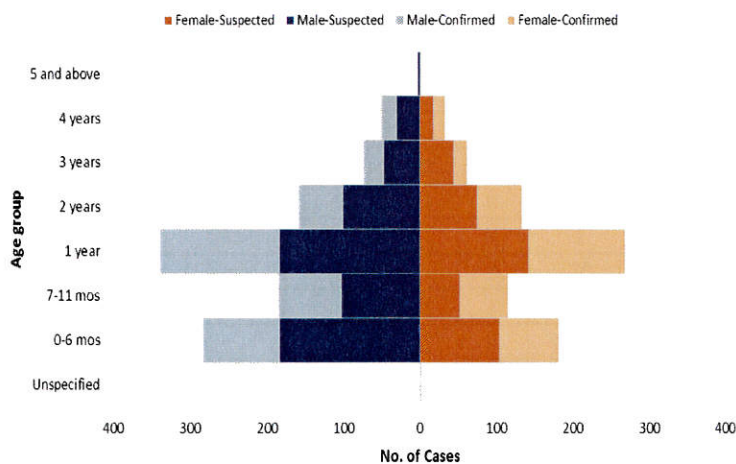


Fig. 12 Rotavirus Cases by Age group, Sex and Case Classification (N=1,890) Philippines, as of June 3, 2017





V. Typhoid

Trend in the Philippines

A total of 7,795 reported typhoid cases were reported nationwide from January 1 to June 3, 2017 with 11 deaths (CFR=0.14%). This is 38.53% lower compared to the same time period last year (12,680) (Table 1). Of the reported cases, 127 (1.63%) cases were confirmed typhoid.

Geographical Distribution

Most of the reported cases were from the following regions: Region X (21.26%), XII (10.49%), Region VI (9.79%), CAR (7.95%), and Region IVA (7.11%). However, the top 5 regions with confirmed typhoid case were the following: Region VIII (18.90%), NCR (14.17%), Region VII (12.60%), Region IVA (11.02%) and Region X (10.24%) (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 (52.42%). The most affected age group were from 5 to 10 years old (18.51%) (Fig.15).

Further Analysis

A total of 6,286 (81%) samples were referred for testing. Of these, 5,405 (86%) were positive for tubex, typhi dot, widal and RDT, 127 (2%) were tested with positive culture for salmonella typhi, and 754 (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	449	727	-38.24	0	0.00	0	0.00
II	217	325	-33.23	1	0.46	1	0.31
III	198	516	-61.63	0	0.00	0	0.00
IV-A	554	956	-42.05	0	0.00	1	0.10
MMAROPA	151	297	-49.16	1	0.66	2	0.67
V	162	169	-4.14	1	0.62	1	0.59
VI	763	1,091	-30.06	2	0.26	4	0.37
VII	443	476	-6.93	3	0.68	4	0.84
VIII	144	320	-55.00	0	0.00	0	0.00
IX	477	804	-40.67	2	0.42	1	0.12
X	1,657	2,371	-30.11	0	0.00	1	0.04
XI	90	137	-34.31	0	0.00	0	0.00
XII	818	1,692	-51.65	1	0.12	0	0.00
ARMM	469	596	-21.31	0	0.00	2	0.34
CAR	620	1,622	-61.78	0	0.00	2	0.12
CARAGA	381	415	-8.19	0	0.00	0	0.00
NCR	202	166	21.69	0	0.00	1	0.60
Philippines	7795	12680	-38.53	11	0.14	20	0.16

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Fig. 13 Reported Typhoid Cases by Morbidity Week
Philippines, January 1- June 3, 2017
2016 vs 2017*

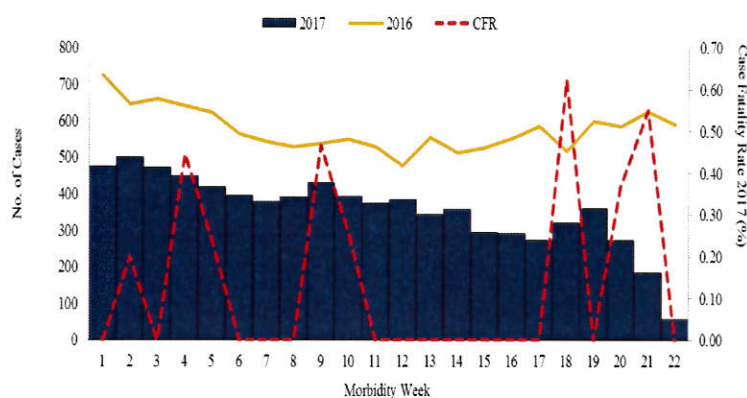


Fig. 14 Typhoid Cases by Region and Case Classification
Philippines, January 1 - June 3, 2017 (N=7,795)

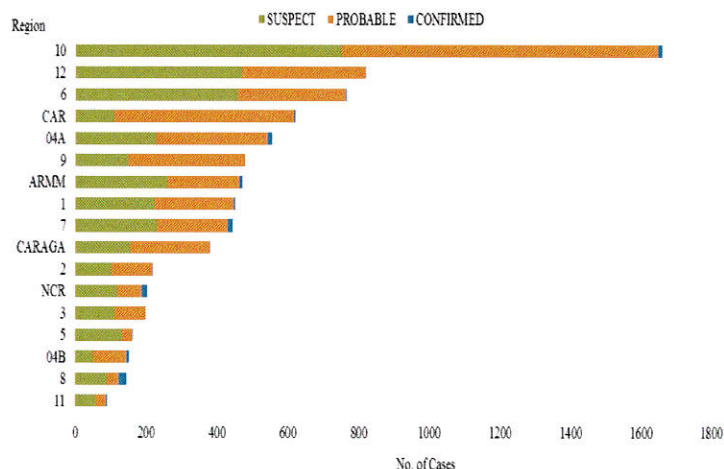
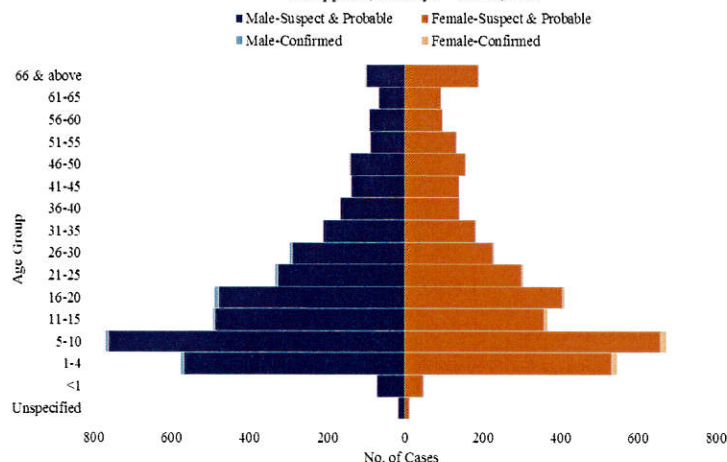



Fig. 15 Typhoid Cases by Age Group, Sex and Case Classification (N=7,795)
Philippines, January 1 - June 3, 2017

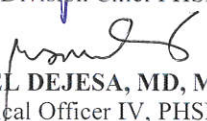





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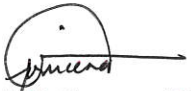

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