



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 9,983 acute bloody diarrhea cases were reported nationwide from January 1 to August 5, 2017. This is 5.42% higher compared to the same time period last year (9,470) (Table 1). There were 39 reported deaths (CFR=0.39%) (Table 2).

Geographical Distribution

Most of the reported cases were from the following regions: Region VII (41%), CAR (11%), CARAGA (10%), Region X (8%), and Region IX (7%) (Fig.2 and Table 2).

Profile of Cases

Ages of cases ranged from less than 1 month to 99 years old (median= 15 years). Majority of cases were male (50.13%). The most affected age group were from 1 year to 4 years (26%) (Fig.3).

Laboratory Results

A total of 5,208 (52%) samples were referred for testing. Of these, 5,088 (98%) 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	68	45	↑ 51.11	0	0.00	0	0.00
II	575	839	↓ -31.47	0	0.00	0	0.00
III	238	136	↑ 75.00	0	0.00	0	0.00
IV-A	398	152	↑ 161.84	2	0.50	1	0.66
MIMAROPA	74	82	↓ -9.76	0	0.00	0	0.00
V	54	10	↑ 440.00	0	0.00	0	0.00
VI	58	106	↓ -45.28	0	0.00	0	0.00
VII	4069	3917	↑ 3.88	29	0.71	33	0.84
VIII	350	290	↑ 20.69	1	0.29	0	0.00
IX	677	546	↑ 23.99	3	0.44	1	0.18
X	801	479	↑ 67.22	0	0.00	0	0.00
XI	190	109	↑ 74.31	2	1.05	3	2.75
XII	174	297	↓ -41.41	0	0.00	0	0.00
ARMM	96	102	↓ -5.88	1	1.04	1	0.98
CAR	1082	1213	↓ -10.80	1	0.09	0	0.00
CRG	998	874	↑ 14.19	0	0.00	0	0.00
NCR	81	273	↓ -70.33	0	0.00	0	0.00
Philippines	9983	9470	↑ 5.42	39	0.39	39	0.41

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	9,983	39	0.39	9,470	↑ 5.42
Confirmed Cholera	99	1	1.01	68	↑ 45.59
Confirmed Rotavirus	1,030	0	0.00	1,144	↓ -9.97
Hepatitis A	291	1	0.34	461	↓ -36.88
Typhoid	12,659	21	0.17	19,670	↓ -35.64

Fig. 1 Acute Bloody Diarrhea Cases by Morbidity Week  
Philippines, January 1-August 5, 2017  
2016 vs 2017\*

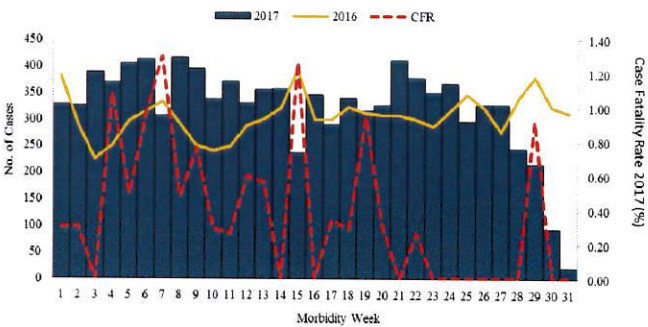


Fig. 2 Acute Bloody Diarrhea Cases by Region and Outcome (N=9,983)  
Philippines, January 1- August 5, 2017

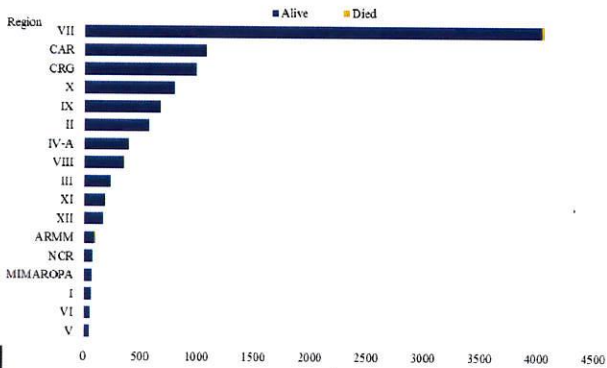
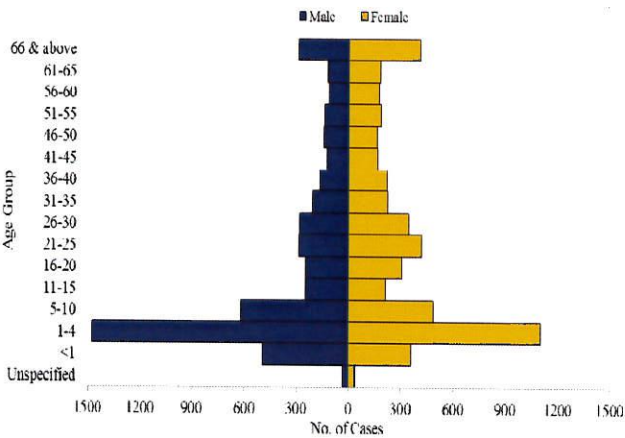


Fig. 3 Acute Bloody Diarrhea Cases by Age Group and Sex  
Philippines, January 1-August 5, 2017 (N=9,983)





II. Cholera

Trend in the Philippines

A total of 2,631 reported cholera cases nationwide from January 1 to August 5, 2017. Among which, 16 deaths were reported (CFR=0.61%). Of the reported cases, 99 (3.8%) cases were laboratory confirmed cholera, with 1 (CFR=1%) confirmed death (Table 1).

Geographical Distribution

Confirmed cases were from the following regions: Region VII (46%), Region IVA (22%), Region X (14%), Region V (8%), Region VI (5%), Region XI (4%), and Region IX (1%) (Fig.5 and Table 4).

Profile of Cases

Ages of confirmed cases ranged from 6 months to 70 years old (median= 12 years). Majority of the confirmed cases were male (61%). The most affected age group were from 5 to 10 years (28%) (Fig.6).

Laboratory Results

A total of 255 (10%) samples were referred for testing. Of these, 99 (39%) were laboratory confirmed for *vibrio cholerae*. The organisms identified among confirmed cases were *vibrio cholerae* (46%), *vibrio cholerae* *ogawa* biotype *el tor* (39%), *vibrio cholerae* *ogawa* (13%), and *vibrio cholerae* *non 01, non 0139* (13%) (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	11	↓1100.00	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	22	12	↑83.33	0	0.00	0	0.00
MIMAROPA	0	0	⇒ 0.00	0	0.00	0	0.00
V	8	12	↓33.33	0	0.00	0	0.00
VI	5	0	↑500.00	0	0.00	0	0.00
VII	45	0	↑4500.00	1	2.22	0	0.00
VIII	0	25	↓2500.00	0	0.00	0	0.00
IX	1	0	↑100.00	0	0.00	0	0.00
X	14	0	↑1400.00	0	0.00	0	0.00
XI	4	2	↑100.00	0	0.00	0	0.00
XII	0	0	⇒ 0.00	0	0.00	0	0.00
ARMM	0	4	↓400.00	0	0.00	0	0.00
CAR	0	2	↓200.00	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	99	68	↑45.59	1	1.01	0	0.00

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Fig. 4 Cholera Cases by Morbidity Week and Case Classification  
Philippines, January 1-August 5, 2017  
2016 vs 2017\*

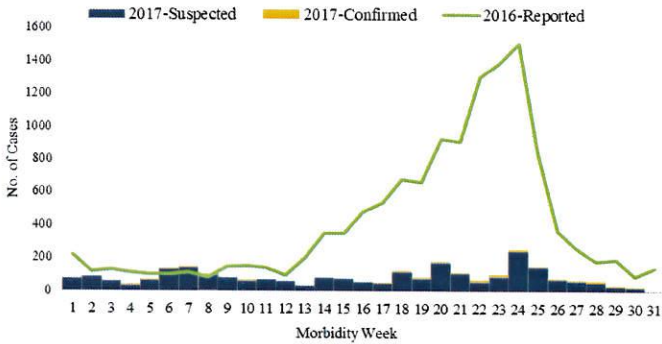


Fig. 5 Cholera Cases by Region and Case Classification (N=2,631)  
Philippines, January 1-August 5, 2017

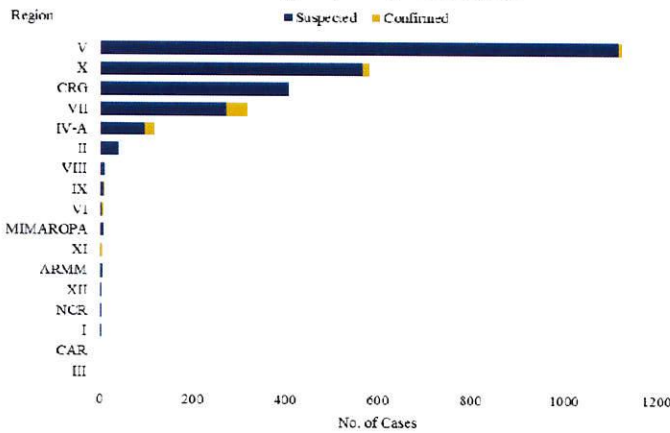


Fig. 6 Cholera Cases by Age Group, Sex and Case Classification (N=2,631)  
Philippines, January 1-August 5, 2017

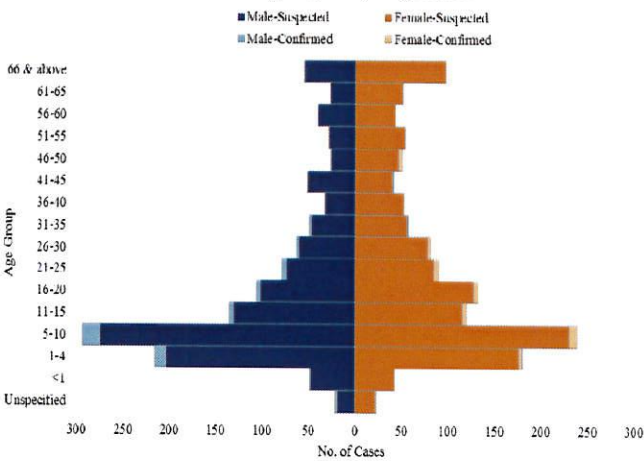


Table 3. Organisms in Cholera Cases (n=99)

Organism	Cases	%
<i>Vibrio Cholerae</i>	46	46
<i>Vibrio Cholerae Ogawa Biotype El Tor</i>	39	39
<i>Vibrio Cholerae Ogawa</i>	13	13
<i>Vibrio Cholerae NON 01, NON 0139</i>	1	1
Total	99	100





III. Hepatitis A

Trend in the Philippines

A total of 291 Hepatitis A cases reported nationwide from January 1 to August 5, 2017. Among which, 1 death was reported (CFR=0.34). This is 36.88% lower compared to the same time period last year (461) (Table 1).

Geographical Distribution

Most of the cases were from the following regions: Region VII (25), Region VI (12%), Region X (11%), NCR (10%) and Region IVA (6%) (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 (16%) (Fig.9).

Laboratory Results

A total of 291 (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	13	5	↑160.00	0	0.00	0	0.00
II	1	5	↓80.00	0	0.00	0	0.00
III	12	15	↓20.00	1	8.33	0	0.00
IV-A	18	34	↓47.06	0	0.00	0	0.00
MIMAROPA	1	21	↓95.24	0	0.00	0	0.00
V	8	9	↓11.11	0	0.00	0	0.00
VI	36	56	↓35.71	0	0.00	0	0.00
VII	73	137	↓46.72	0	0.00	1	0.73
VIII	4	10	↓60.00	0	0.00	0	0.00
IX	18	41	↓56.10	0	0.00	0	0.00
X	32	33	↓3.03	0	0.00	0	0.00
XI	3	8	↓62.50	0	0.00	0	0.00
XII	11	15	↓26.67	0	0.00	0	0.00
ARMM	12	21	↓42.86	0	0.00	0	0.00
CAR	8	5	↑60.00	0	0.00	0	0.00
CRG	12	8	↑50.00	0	0.00	0	0.00
NCR	29	38	↓23.68	0	0.00	1	2.63
Philippines	291	461	↓36.88	1	0.34	2	0.43

Fig. 7 Hepatitis A Cases by Morbidity Week  
Philippines, January 1-August 5, 2017  
2016 vs 2017\*

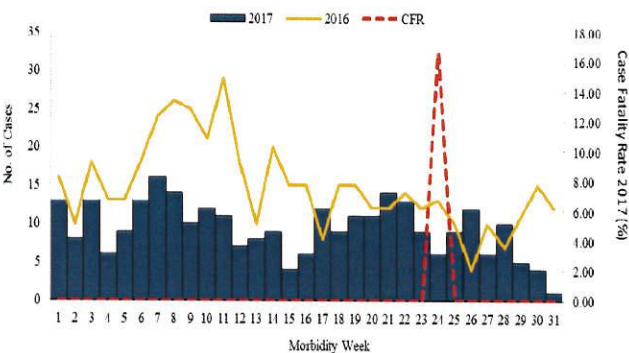


Fig. 8 Hepatitis A Cases by Region (N=291)  
Philippines, January 1-August 5, 2017

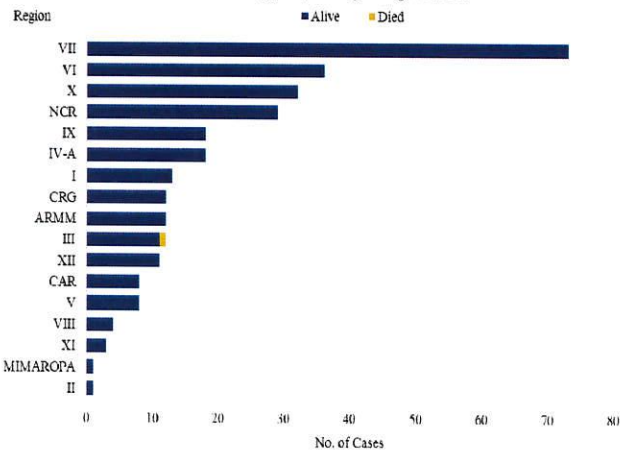
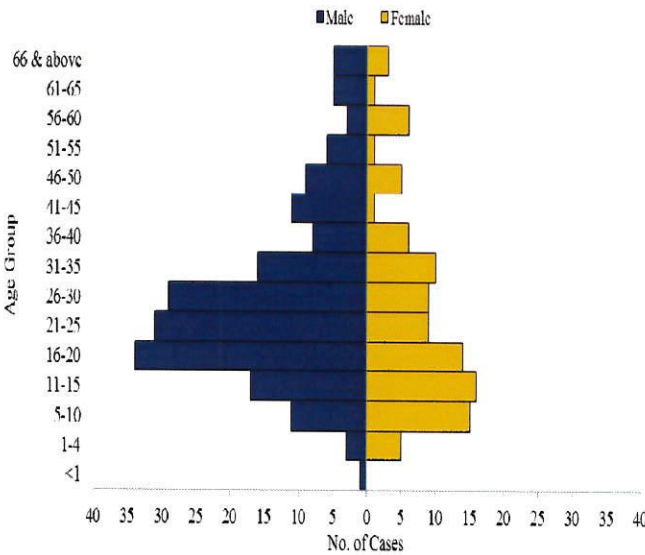


Fig. 9 Hepatitis A Cases by Age Group and Sex (N=291)  
Philippines, January 1-August 5, 2017



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



IV. Rotavirus

Trend in the Philippines

A total of 2,678 reported rotavirus cases nationwide from January 1 to August 5, 2017. Among which, 20 deaths were reported (CFR=0.75%). Of the reported cases, 1,030 (38.46%) cases were laboratory confirmed rotavirus, no deaths reported. This is 10% lower compared to the same time period last year (1,144) (Table 6).

Geographical Distribution

Confirmed cases were mostly from the following regions: Region I (32.33%), Region VI (21.55%), CARAGA (12.23%), ARMM (7.77%), and Region XII (7.28%) (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 (57%). Most of the confirmed cases belonged to 1 year old (35.34%) (Fig. 12).

Laboratory Results

A total of 1,984 (74%) samples were tested. Of these, 1,030 (52%) were laboratory confirmed for rotavirus and 954 (48%) 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	333	262	↑ 27.10	0	0.00	2	0.76
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
MIMAROPA	62	8	↑ 675.00	0	0.00	0	0.00
V	50	23	↑ 117.39	0	0.00	0	0.00
VI	222	275	↓ 19.27	0	0.00	0	0.00
VII	2	0	↑ 200.00	0	0.00	0	0.00
VIII	0	13	↓ 1300.00	0	0.00	0	0.00
IX	0	69	↓ 6900.00	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	75	137	↓ 45.26	0	0.00	0	0.00
ARMM	80	180	↓ 55.56	0	0.00	0	0.00
CAR	0	0	⇒ 0.00	0	0.00	0	0.00
CRG	126	74	↑ 70.27	0	0.00	0	0.00
NCR	73	98	↓ 25.51	0	0.00	0	0.00
Philippines	1030	1144	↓ 9.97	0	0.00	2	0.17

Fig. 10 Confirmed Rotavirus Cases by Morbidity Week and Case Classification, Philippines, January 1- August 5, 2017  
2017\* vs 2016

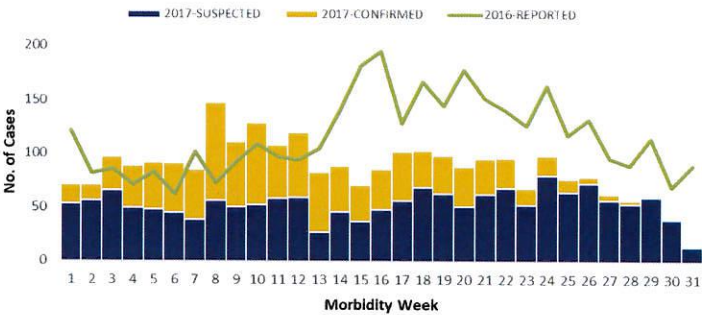


Fig. 11 Rotavirus Cases by Region and Case Classification (N=2,678)  
Philippines, January 1- August 5, 2017

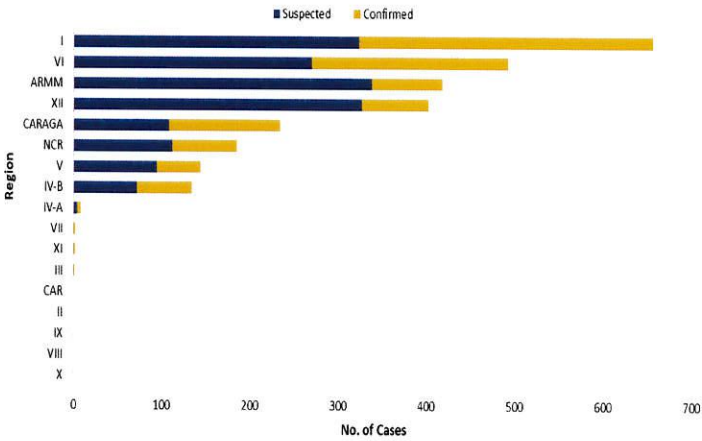
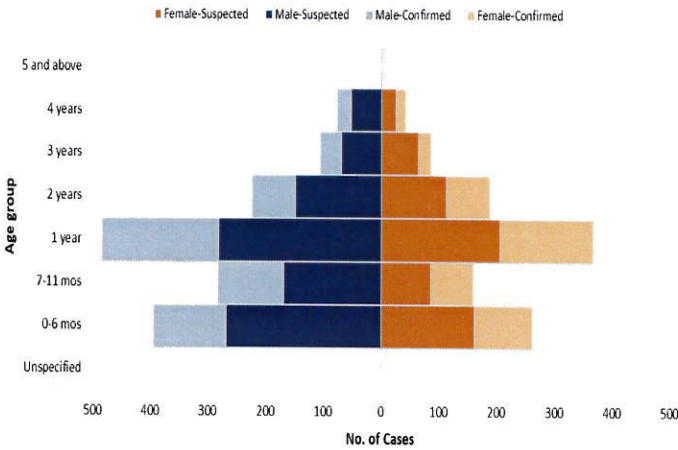


Fig. 12 Rotavirus Cases by Age group, Sex and Case Classification (N=2,678)  
Philippines, January 1 - August 5, 2017



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V. Typhoid

Trend in the Philippines

A total of 12,659 reported typhoid cases were reported nationwide from January 1 to August 5, 2017 with 21 deaths (CFR=0.17%). This is 35.64% lower compared to the same time period last year (19,670) (Table 1). Of the reported cases, 191 (1.51%) cases were confirmed typhoid.

Geographical Distribution

Most of the reported cases were from the following regions: Region X (19.71%), XII (10.65%), Region VI (9.56%), CAR (9.21%), and Region IVA (7.65%). However, the top 5 regions with confirmed typhoid case were the following: Region VIII (34.03%), Region VII (12.57%), Region X (9.42%), Region IVA (7.33%) and Region IX (6.28%) (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 (52.61%). The most affected age group were from 5 to 10 years old (19.22%) (Fig.15).

Laboratory Results

A total of 10,225 (81%) samples were referred for testing. Of these, 8,828 (86%) were positive for tubex, typhi dot, widal and RDT, 191 (2%) were tested with positive culture for salmonella typhi, and 1,206 (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	712	1,276	↓ -44.20	0	0.00	0	0.00
II	347	436	↓ -20.41	1	0.29	1	0.23
III	383	779	↓ -50.83	0	0.00	0	0.00
IV-A	968	1,294	↓ -25.19	0	0.00	1	0.08
MIMAROPA	210	592	↓ -64.53	1	0.48	2	0.34
V	257	224	↑ 14.73	1	0.39	3	1.34
VI	1,210	1,780	↓ -32.02	4	0.33	4	0.22
VII	821	788	↑ 4.19	4	0.49	5	0.63
VIII	270	403	↓ -33.00	2	0.74	0	0.00
IX	774	1,178	↓ -34.30	3	0.39	4	0.34
X	2,495	3,506	↓ -28.84	0	0.00	1	0.03
XI	155	173	↓ -10.40	0	0.00	0	0.00
XII	1,348	2,773	↓ -51.39	1	0.07	0	0.00
ARMM	637	968	↓ -34.19	4	0.63	2	0.21
CAR	1,166	2,688	↓ -56.62	0	0.00	2	0.07
CARAGA	640	575	↑ 11.30	0	0.00	0	0.00
NCR	266	237	↑ 12.24	0	0.00	3	1.27
Philippines	12,659	19,670	↓ -35.64	21	0.17	28	0.14

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Fig. 13 Reported Typhoid Cases by Morbidity Week  
Philippines, January 1- August 5, 2017  
2016 vs 2017\*

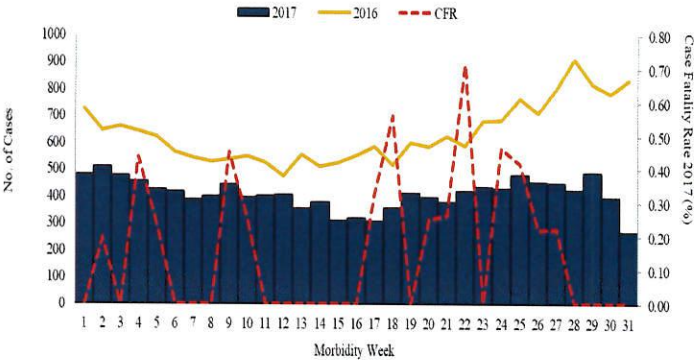


Fig. 14 Typhoid Cases by Region and Case Classification  
Philippines, January 1 - August 5, 2017 (N=12,659)

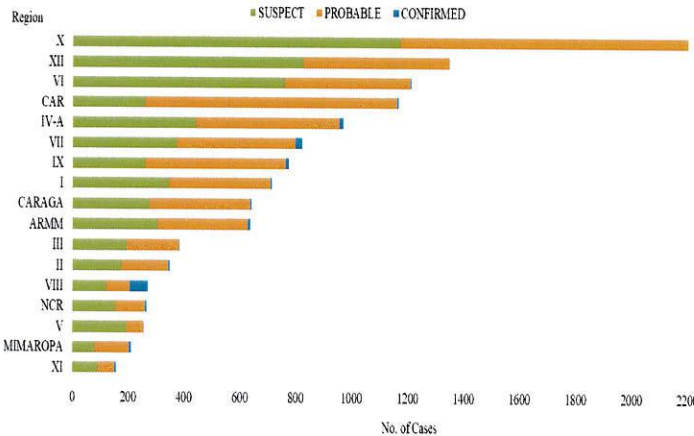
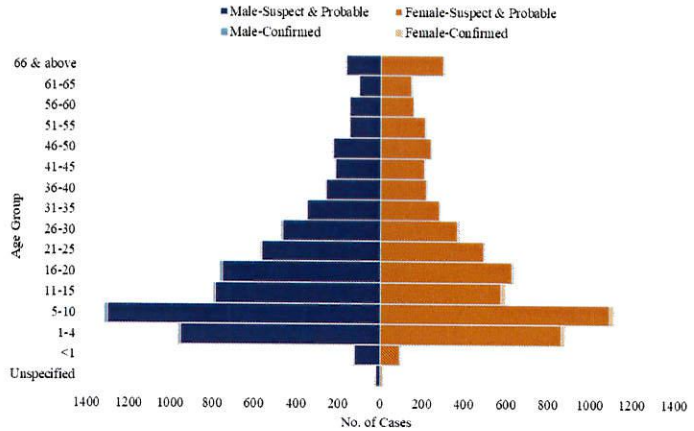


Fig. 15 Typhoid Cases by Age Group, Sex and Case Classification (N=12,659)  
Philippines, January 1 - August 5, 2017







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**Food and Waterborne Diseases**  
(January 1 to August 5, 2017)


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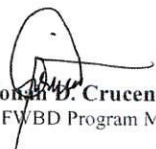
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