



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 17,768 acute bloody diarrhea cases were reported nationwide from January 1 to December 2, 2017. This is 30.45% higher compared to the same time period last year (13,621) (Table 1). There were 48 reported deaths (CFR=0.27%) (Table 2).

Geographical Distribution

Most of the reported cases were from the following regions: Region VII (35.16%), CARAGA (17.87%), CAR (8.58%), Region IX (8.34%), and Region II (7.62%) (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 female (50.24%). The most affected age group were from 1 year to 4 years (25%) (Fig.3).

Laboratory Results

A total of 10,810 (61%) samples were referred for testing. Of these, 9,468 (88%) were laboratory confirmed with different organisms. The most identified organism was *entamoeba histolytica* (87%).

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

Region	Cases			Deaths		
	2017	2016	% Change	2017	CFR (%)	2016
I	99	77	↑ 28.57	0	0.00	1
II	1354	1123	↑ 20.57	1	0.07	0
III	311	218	↑ 42.66	0	0.00	0
IV-A	682	271	↑ 151.66	2	0.29	1
MMAROPA	107	105	↑ 1.90	0	0.00	0
V	66	52	↑ 26.92	0	0.00	0
VI	133	152	↓ 12.50	0	0.00	0
VII	6247	5479	↑ 14.02	36	0.58	37
VIII	490	357	↑ 37.25	1	0.20	0
IX	1482	835	↑ 77.49	3	0.20	1
X	1262	702	↑ 79.77	1	0.08	2
XI	306	226	↑ 35.40	2	0.65	3
XII	257	409	↓ 37.16	0	0.00	1
ARMM	158	129	↑ 22.48	1	0.63	1
CAR	1525	1698	↓ 10.19	1	0.07	0
CARAGA	3175	1453	↑ 118.51	0	0.00	0
NCR	114	335	↓ 65.97	0	0.00	0
Philippines	17,768	13,621	↑ 30.45	48	0.27	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. A PDF file of this report is available at www.doh.gov.ph/statistics.

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	17,768	48	0.27	13,621	↑	30.45
Confirmed Cholera	130	1	0.77	119	↑	9.24
Confirmed Rotavirus	1,247	1	0.08	1,413	↓	-11.75
Hepatitis A	422	1	0.24	646	↓	-34.67
Typhoid	21,653	40	0.18	29,984	↓	-27.78

Fig. 1 Acute Bloody Diarrhea Cases by Morbidity Week
Philippines, January 1-December 2, 2017
2016 vs 2017*

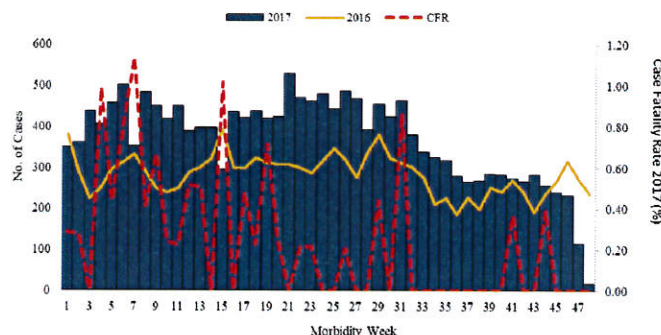


Fig. 2 Acute Bloody Diarrhea Cases by Region and Outcome (N=17,768)
Philippines, January 1-December 2, 2017

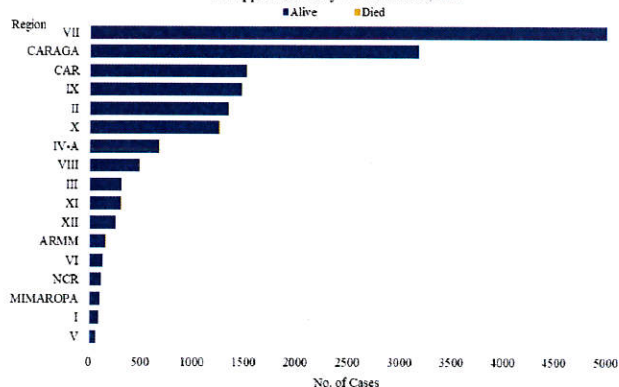
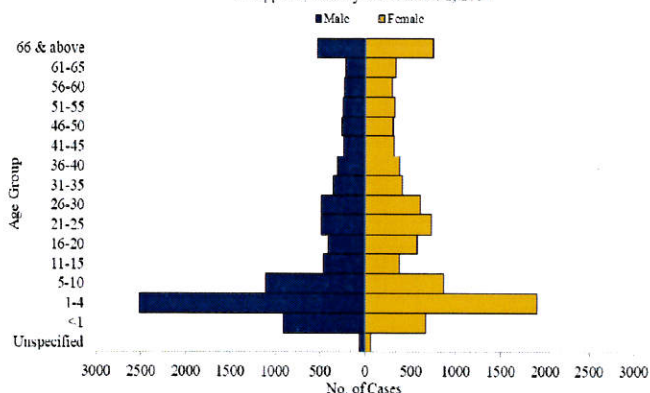


Fig. 3 Acute Bloody Diarrhea Cases by Age Group and Sex (N=17,768)
Philippines, January 1-December 2, 2017





II. Cholera

Trend in the Philippines

A total of 3,653 reported cholera cases nationwide from January 1 to December 2, 2017. This is 74.5% lower compared to the same time period last year (14,354). Among which, 27 deaths were reported (CFR=0.74%). Of the reported cases, 130 (3.56%) cases were laboratory confirmed cholera, with 1 (CFR=0.77%) confirmed death (Table 1). This is 9.24% higher compared to the same time period last year (119) (Table 4).

Geographical Distribution

Confirmed cases were from the following regions: Region VII (44.62%), Region IVA (19.23%), Region X (16.15%), Region V (9.23%), Region VI (5.38%), Region XI (3.08%), Region IX, CARAGA and ARMM (0.81%) (Fig.5 and Table 4).

Profile of Cases

Ages of confirmed cases ranged from 6 months to 70 years old (median= 10 years). Majority of the confirmed cases were male (62%). The most affected age group were from 5 to 10 years (29%) (Fig.6).

Laboratory Results

A total of 370 (10%) samples were referred for testing. Of these, 130 (35%) were laboratory confirmed for *vibrio cholerae*.

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

Region	Cases			Deaths			
	2017	2016	% Change	2017	CFR (%)	2016	CFR (%)
I	0	16	↓1600.00	0	0.00	0	0.00
II	0	0	⇒ 0.00	0	0.00	0	0.00
III	0	11	↓1100.00	0	0.00	0	0.00
IV-A	25	21	↑19.05	0	0.00	0	0.00
MIMAROPA	0	0	⇒ 0.00	0	0.00	0	0.00
V	12	12	⇒ 0.00	0	0.00	0	0.00
VI	7	16	↓56.25	0	0.00	0	0.00
VII	58	0	↑5800.00	1	1.72	0	0.00
VIII	0	26	↓2600.00	0	0.00	0	0.00
IX	1	0	↑100.00	0	0.00	0	0.00
X	21	8	↑162.50	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	1	4	↓75.00	0	0.00	0	0.00
CAR	0	2	↓200.00	0	0.00	0	0.00
CARAGA	1	1	⇒ 0.00	0	0.00	0	0.00
NCR	0	0	⇒ 0.00	0	0.00	0	0.00
Philippines	130	119	↑9.24	1	0.77	0	0.00

Fig. 4 Cholera Cases by Morbidity Week and Case Classification
Philippines, January 1-December 2, 2017
2016 vs 2017*

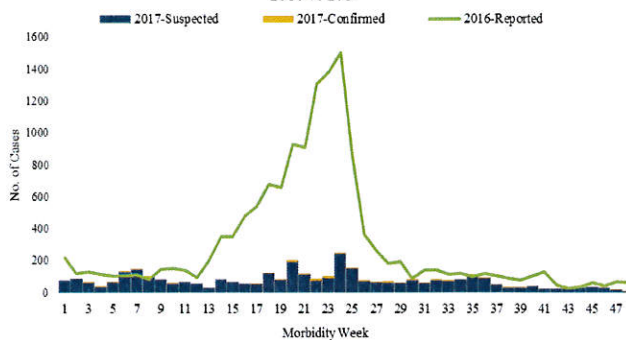


Fig. 5 Cholera Cases by Region and Case Classification (N=3,653)
Philippines, January 1-December 2, 2017

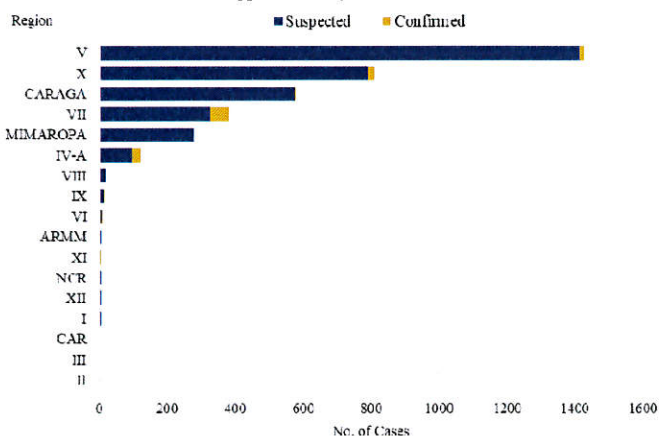


Fig. 6 Cholera Cases by Age Group, Sex and Case Classification (N=3,653)
Philippines, January 1-December 2, 2017

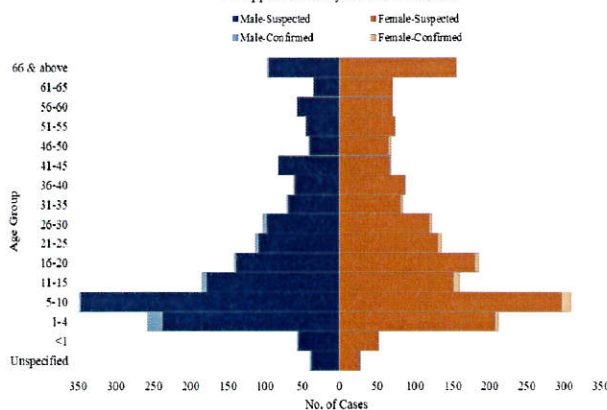


Table 3. Organisms in Cholera Cases (n=130)

Organism	Cases	%
<i>Vibrio Cholerae</i>	61	47
<i>Vibrio Cholerae</i> Ogawa Biotype El Tor	51	39
<i>Vibrio Cholerae</i> Ogawa	14	11
<i>Vibrio Cholerae</i> 0139	3	2
<i>Vibrio Cholerae</i> Non 01, Non 0139	1	1
Total	130	100



III. Hepatitis A

Trend in the Philippines

A total of 422 Hepatitis A cases reported nationwide from January 1 to December 2 2017. Among which, 1 death was reported (CFR=0.24%). This is 34.67% lower compared to the same time period last year (646) (Table 1).

Geographical Distribution

Most of the cases were from the following regions: Region VII (25.83%), Region VI (13.98%), Region X (12.56%), NCR (10.43%) and Region IVA (6.16%) (Fig.8 and Table 5).

Profile of Cases

Ages of cases ranged from less than 1 month to 90 years old (median= 25 years). Majority of the confirmed cases were male (63%). The most affected age group were from 16 to 20 years (18%) (Fig.9).

Laboratory Results

A total of 422 (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	15	9	↑ 66.67	0	0.00	0	0.00
II	4	7	↓ -42.86	0	0.00	0	0.00
III	14	20	↓ -30.00	1	7.14	0	0.00
IV-A	26	53	↓ -50.94	0	0.00	0	0.00
MIMAROPA	1	26	↓ -96.15	0	0.00	0	0.00
V	12	14	↓ -14.29	0	0.00	0	0.00
VI	59	70	↓ -15.71	0	0.00	0	0.00
VII	109	191	↓ -42.93	0	0.00	1	0.52
VIII	7	10	↓ -30.00	0	0.00	0	0.00
IX	24	56	↓ -57.14	0	0.00	0	0.00
X	53	51	↑ 3.92	0	0.00	0	0.00
XI	4	8	↓ -50.00	0	0.00	0	0.00
XII	14	23	↓ -39.13	0	0.00	0	0.00
ARMM	14	33	↓ -57.58	0	0.00	0	0.00
CAR	8	6	↑ 33.33	0	0.00	0	0.00
CARAGA	14	12	↑ 16.67	0	0.00	0	0.00
NCR	44	57	↓ -22.81	0	0.00	1	1.75
Philippines	422	646	↓ -34.67	1	0.24	2	0.31

Fig. 7 Hepatitis A Cases by Morbidity Week
Philippines, January 1-December 2, 2017
2016 vs 2017*

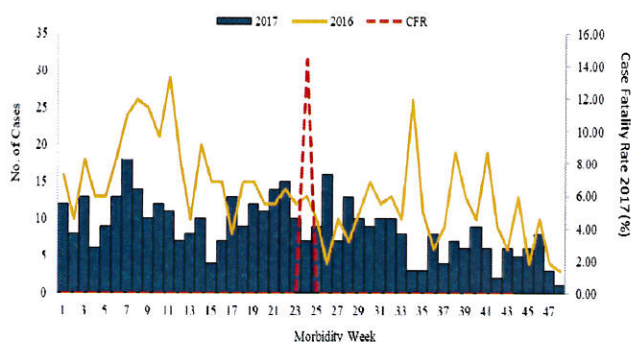


Fig. 8 Hepatitis A Cases by Region (N=422)
Philippines, January 1-December 2, 2017

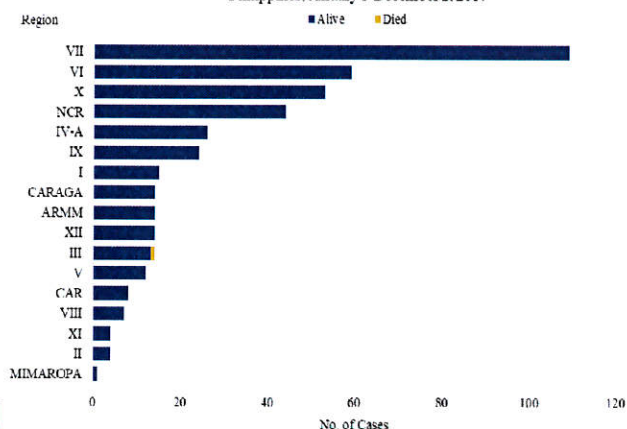
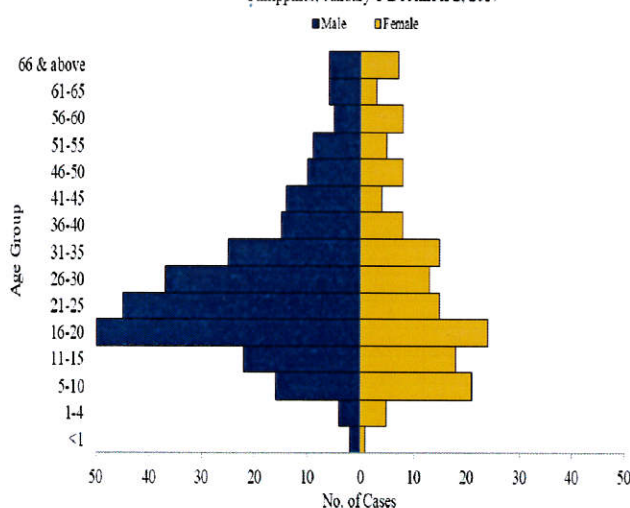


Fig. 9 Hepatitis A Cases by Age Group and Sex (N=422)
Philippines, January 1-December 2, 2017





IV. Rotavirus

Trend in the Philippines

A total of 3,512 reported rotavirus cases nationwide from January 1 to December 2, 2017. This is 25.56% lower compared to the same time period last year (4,718). Among which, 27 deaths were reported (CFR=0.77%). Of the reported cases, 1,247 (36%) cases were laboratory confirmed rotavirus with 1 death reported (CFR=0.08%). This is 11.75% lower compared to the same time period last year (1,413) (Table 6).

Geographical Distribution

Confirmed cases were mostly from the following regions: Region I (26.86%), Region VI (22.69%), Region XII (12.59%), CARAGA (11.31%), and ARMM (10.34%) (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 are 1 year old (38.65%) (Fig. 12).

Further Analysis

A total of 2,557 (73%) samples were tested. Of these, 1,247 (49%) were laboratory confirmed for rotavirus and 1,310 (51%) 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	335	313	↑ 7.03	0	0.00	2	0.64
II	0	0	⇒ 0.00	0	0.00	0	0.00
III	1	2	↓ -50.00	0	0.00	0	0.00
IV-A	5	4	↑ 25.00	0	0.00	0	0.00
MIMAROPA	65	19	↑ 242.11	0	0.00	0	0.00
V	53	27	↑ 96.30	0	0.00	0	0.00
VI	283	319	↓ -11.29	0	0.00	0	0.00
VII	2	0	↑ 200.00	0	0.00	0	0.00
VIII	0	30	↓ -3000.00	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	157	195	↓ -19.49	0	0.00	0	0.00
ARMM	129	213	↓ -39.44	1	0.78	1	0.47
CAR	0	0	⇒ 0.00	0	0.00	0	0.00
CARAGA	141	110	↑ 28.18	0	0.00	0	0.00
NCR	74	112	↓ -33.93	0	0.00	0	0.00
Philippines	1,247	1,413	↓ -11.75	1	0.08	3	0.21

Case counts reported here do NOT represent the final number and are subject to change after inclusion of delayed reports and review of cases. A PDF file of this report is available at www.doh.gov.ph/statistics.

Fig. 10 Rotavirus Cases by Morbidity Week and Case Classification, Philippines, January 1- December 2, 2017
2017* vs 2016

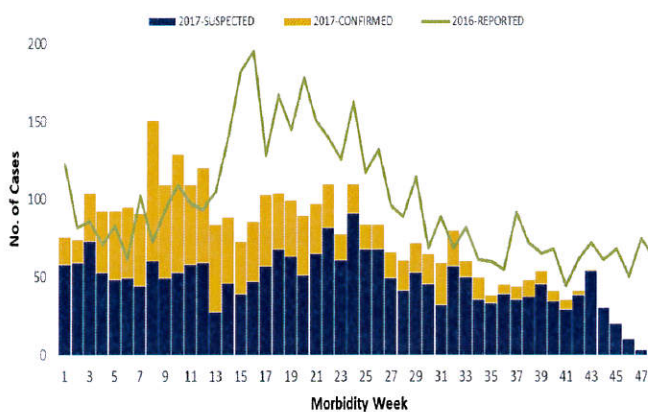


Fig. 11 Rotavirus Cases by Region and Case Classification (N=3,512)
Philippines, January 1- December 2, 2017

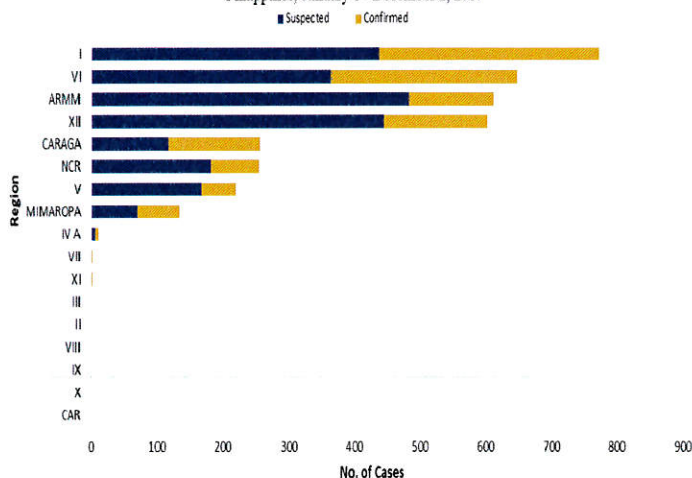
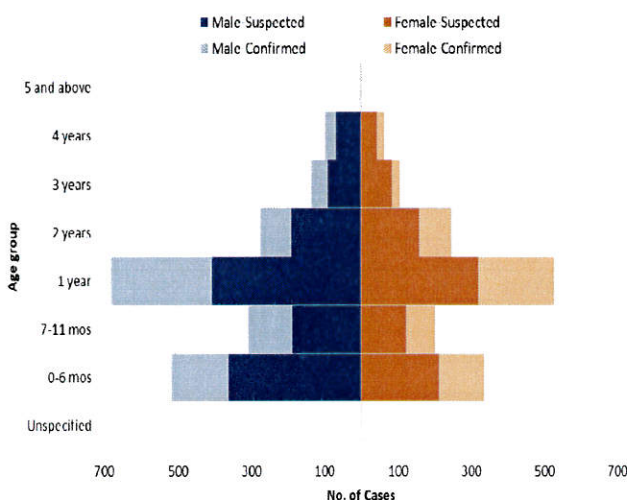


Fig. 12 Rotavirus Cases by Age group, Sex and Case Classification (N=3,512)
Philippines, January 1 - December 2, 2017





V. Typhoid

Trend in the Philippines

A total of 21,653 reported typhoid cases were reported nationwide from January 1 to December 2, 2017 with 40 deaths (CFR=0.18%). This is 27.78% lower compared to the same time period last year (29,984) (Table 1). Of the reported cases, 345 (1.6%) cases were confirmed typhoid with 1 death (CFR=0.29%). This is 11.29% higher compared to the same time period last year (310).

Geographical Distribution

Most of the reported cases were from the following regions: Region X (20.10%), XII (10.56%), CAR (9.31%), Region VI (9.04%), and Region IX (7.78%). However, the top 5 regions with confirmed typhoid case were the following: Region VIII (40.87%), Region VII (12.17%), Region X (9.86%), Region IVA (7.25%) and Region IX (5.51%) (Fig.14 and Table 7).

Profile of Cases

Ages of reported cases ranged from less than 1 month to 106 years old (median= 17 years). Majority of cases were male (53%). The most affected age group were from 5 to 10 years old (19.77%) (Fig.15).

Further Analysis

A total of 17,596 (81%) samples were referred for testing. Of these, 15,191 (86%) were positive for tubex, typhi dot, widal and RDT, 345 (2%) were tested with positive culture for salmonella typhi, and 2,060 (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	1,234	1,912	↓ -35.46	1	0.08	0	0.00
II	764	635	↑ 20.31	3	0.39	1	0.16
III	624	1,298	↓ -51.93	0	0.00	0	0.00
IV-A	1,574	1,951	↓ -19.32	0	0.00	1	0.05
MIMAROPA	330	938	↓ -64.82	1	0.30	2	0.21
V	385	360	↑ 6.94	1	0.26	3	0.83
VI	1,957	3,055	↓ -35.94	4	0.20	8	0.26
VII	1,396	1,177	↑ 18.61	14	1.00	8	0.68
VIII	471	509	↓ -7.47	2	0.42	0	0.00
IX	1,684	1,728	↓ -2.55	5	0.30	8	0.46
X	4,352	5,313	↓ -18.09	0	0.00	1	0.02
XI	226	223	↑ 1.35	0	0.00	0	0.00
XII	2,286	3,955	↓ -42.20	1	0.04	1	0.03
ARMM	1,097	1,418	↓ -22.64	6	0.55	3	0.21
CAR	2,015	4,236	↓ -52.43	1	0.05	2	0.05
CARAGA	885	930	↓ -4.84	0	0.00	1	0.11
NCR	373	346	↑ 7.80	1	0.27	3	0.87
Philippines	21,653	29,984	↓ -27.78	40	0.18	42	0.14

Fig. 13 Reported Typhoid Cases by Morbidity Week
Philippines, January 1- December 2, 2017
2016 vs 2017*

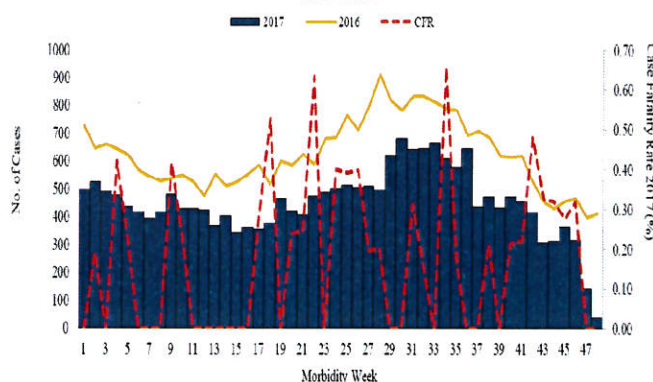


Fig. 14 Typhoid Cases by Region and Case Classification (N=21,653)
Philippines, January 1 - December 2, 2017

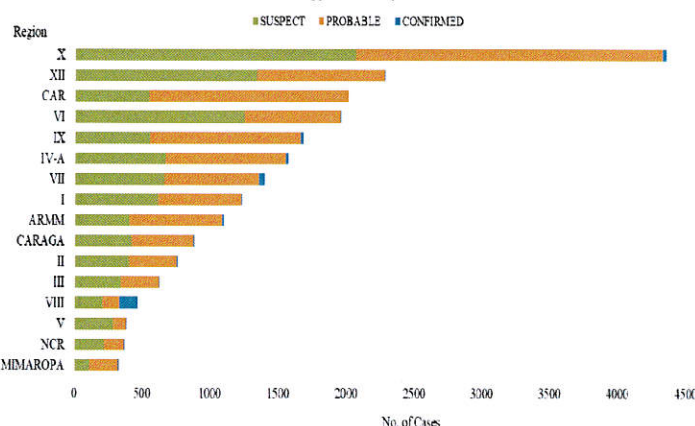
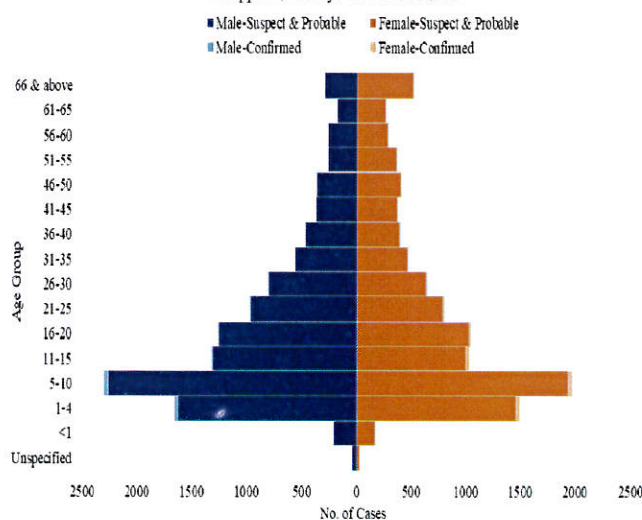


Fig. 15 Typhoid Cases by Age Group, Sex and Case Classification (N=21,653)
Philippines, January 1 - December 2, 2017






Department of Health
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Food and Waterborne Diseases
(January 1 to December 2, 2017)

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