



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. The mode of transmission is fecal-oral route. This summary report presents routinely collected FWBD data for the period of January 1 to August 25, 2018. (Table 1)

Table 1. Food & Waterborne Diseases
Philippines, 2018* vs 2017

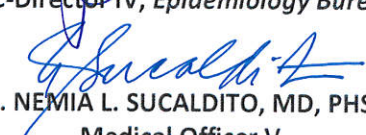
FOOD/WATER-BORNE DISEASES	2018			2017	% Difference *2018 vs 2017
	Cases	Deaths	CFR (%)	Cases	
Acute Bloody Diarrhea	12,435	15	0.12	14,332	↓13
Confirmed Cholera	4	0	0.00	119	↓97
Confirmed Rotavirus	508	0	0.00	1222	↓58
Hepatitis A	231	0	0.00	358	↓35
Typhoid Fever	12,905	22	0.17	16,469	↓22

PIDSR Case Definition for Food and Waterborne Diseases

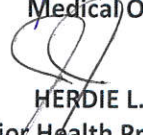
Acute Bloody Diarrhea (ABD)	
Reported Case	<ul style="list-style-type: none"> A person with acute diarrhea with visible blood in the stool.
Cholera	
Suspected Case	<ul style="list-style-type: none"> Disease unknown in the area: A person aged 5 years or more with severe dehydration or who died from acute watery diarrhea, OR Disease endemic in the area: A person aged 5 years or more with acute watery diarrhea with or without vomiting, OR In an area where there is a cholera epidemic: A person with acute watery diarrhea, with or without vomiting.
Confirmed Case	<ul style="list-style-type: none"> A suspected case that is laboratory-confirmed. Isolation of <i>Vibrio cholerae</i> 01 or 0139 from stools in any patient with diarrhea.
Rotavirus	
Suspected Case	<ul style="list-style-type: none"> A child <5 years of age who undergoes treatment (means that the child received intravenous rehydration therapy while undergoing observation at the Emergency Room OR was admitted in a hospital ward) for acute diarrhea (passage of 3 or more watery stools within a 24-hour period for < 14 days) in a participating hospital.
Confirmed Case	<ul style="list-style-type: none"> A suspected case that has been laboratory-confirmed as Rotavirus.
Hepatitis A	
Suspected Case	<ul style="list-style-type: none"> A person with acute illness characterized by acute jaundice, dark urine, loss of appetite, body weakness, extreme fatigue and right upper quadrant tenderness.
Confirmed Case	<ul style="list-style-type: none"> A suspected case that is laboratory confirmed (positive for IgM anti-HAV).
Typhoid Fever	
Suspected Case	<ul style="list-style-type: none"> A person with an illness characterized by insidious onset of sustained fever, headache, malaise, anorexia, relative bradycardia, constipation or diarrhea, and non-productive cough.
Probable Case	<ul style="list-style-type: none"> A suspected case that is epidemiologically linked to a confirmed case in an outbreak.
Confirmed Case	<ul style="list-style-type: none"> A suspected or probable case that is laboratory confirmed. (Isolation of <i>Salmonella enterica</i> from blood, stool, or other clinical specimen)

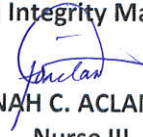
Editorial Board

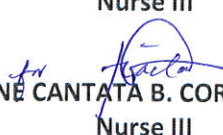

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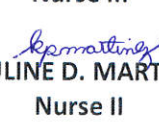

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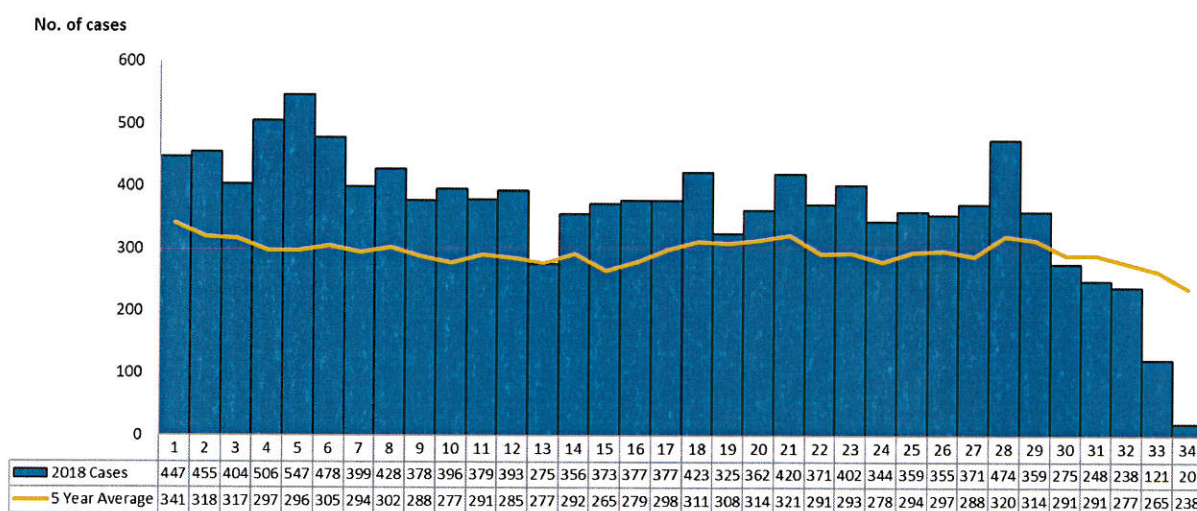


I. Acute Bloody Diarrhea (ABD)

Trend in the Philippines

A total of 12,435 acute bloody diarrhea cases were reported nationwide from January 1 to August 25, 2018. The distribution of cases for 2018 compared to the 5-year average of cases from 2013-2017 is shown below (Figure 1).

Figure 1. Acute Bloody Diarrhea Cases by Morbidity Week (N=12,435)
Philippines, January 1 to August 25, 2018 vs 5 Year Average Data



*same time period

Geographical Distribution

Despite an increase in cases in 2018 compared to the 5-year average, there was a noted 13% decrease of reported ABD cases from 14,332 cases in 2017 to 12,435 cases in 2018 for the same period (January 1 to August 25, 2018). Most of the reported cases were from the following regions: Region VII (4,760, 38%), CARAGA (1,642, 13%), Region IX (1,474, 12%), CAR (1,110, 9%), and Region X (941, 8%) (Table 2).

Table 2. Acute Bloody Diarrhea Cases & Deaths (N=12,435)
Philippines, 2018* vs 2017**

Region	2018		2017		% Change
	Cases	Deaths	Cases	Deaths	
PHILIPPINES	12,435	15	14,332	46	↓13
I	64	0	82	0	↓22
II	588	0	979	0	↓40
III	446	0	266	0	↑68
IV-A	650	0	527	2	↑23
MIMAROPA	90	0	102	0	↓12
V	18	0	61	0	↓70
VI	38	0	113	0	↓66
VII	4,760	13	4,943	35	↓4
VIII	233	0	406	1	↓43
IX	1,474	1	1,165	3	↑27
X	941	0	994	1	↓5
XI	105	0	230	2	↓54
XII	122	0	214	0	↓43
ARMM	115	0	132	1	↓13
CAR	1,110	0	1,255	1	↓12
CARAGA	1,642	1	2,774	0	↓41
NCR	39	0	89	0	↓56

*From the period of January 1 to August 25, 2018

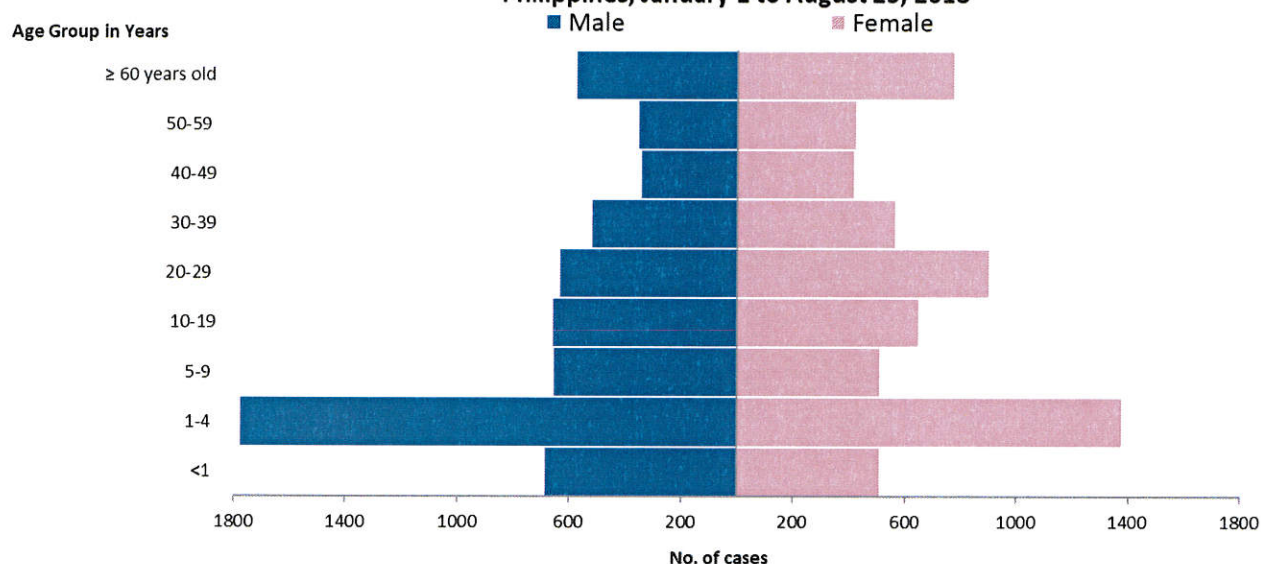
**From the period of January 1 to August 25, 2017



Profile of Cases

Majority of the reported ABD cases were male (6,263, 50.37%). Age of cases ranged from less than 1 month to 98 years old (median age of 15 years). The most affected age group were from 1 year to 4 years (3,162, 25%) (Figure 2).

Figure 2. Acute Bloody Diarrhea Cases by Age Group and Sex (N=12,435)
Philippines, January 1 to August 25, 2018



Laboratory Results

A total of 7,739 (62%) samples were collected for laboratory testing (Figure 3). Of these, 6,640 (86%) were tested for different organisms. The frequently identified organism was *Entamoeba histolytica* (5,710, 86%) (Table 3).

Figure 3. ABD Cases by Laboratory Status (N=12,435)
Philippines, January to August 2018

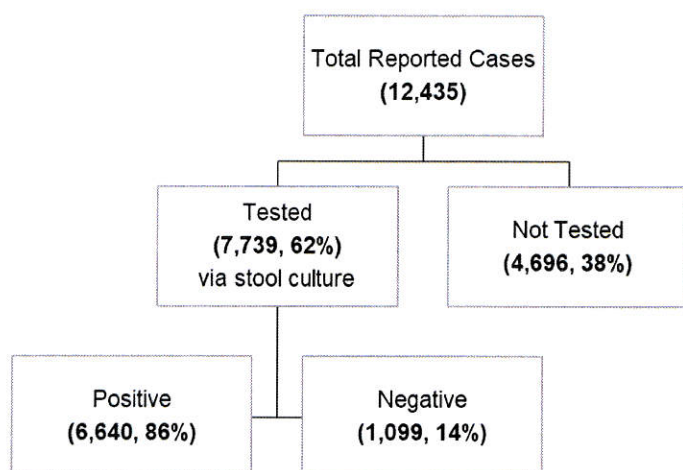


Table 3. Top 3 Organisms in ABD Cases*
Philippines, January to August 2018

Organism	Cases
<i>Entamoeba histolytica</i>	5,710
<i>Escherichia Coli</i>	244
<i>Trophozoites</i>	240

*multiple results and tested via stool culture

Profile of Deaths

There were twelve (15) deaths (CFR=0.12%) out of the 12,435 reported ABD cases. Majority of the reported deaths were male (11, 73%). Age of deaths ranged from 7 months old to 64 years old (median age of 38 years). Age group of these deaths were : less than 1 year (1, 7%), 1 to 4 years (3, 20%), 5 to 9 years (2, 13%), 10 to 19 years (1, 7%), 30 to 39 years (1, 7%), 40 to 49 years (1, 7%), 50 to 59 years (3, 20%) and 60 years and above (3, 20%).

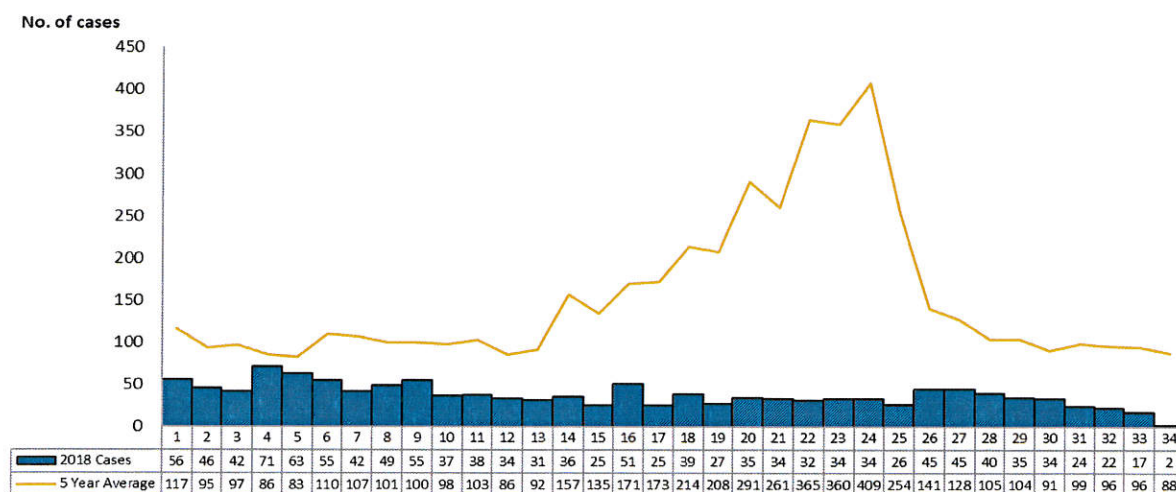


II. Cholera

Trend in the Philippines

A total of 1,281 reported cholera cases were reported nationwide from January 1 to August 25, 2018. The distribution of cases for 2018 compared to the 5-year average of cases from 2013-2017 is shown below (Figure 4).

Figure 4. Cholera Cases by Morbidity Week (N=1,281)
Philippines, January 1 to August 25, 2018 vs 5 Year Average Data



*same time period

Geographical Distribution

There was a 59% decrease of reported cholera cases from 3,118 cases in 2017 to 1,281 cases in 2018. Most of the reported cases were from the following regions: CARAGA (625, 49%), Region V (472, 37%), Region X (147, 11%), Region XI (15, 1%) and Region IV-A (9, 1%) (Table 4). There were six deaths (CFR of 0.5%) coming from Region IV-A and V.

Table 4. Reported Cholera Cases & Deaths by Region (N=1,281)
Philippines, 2018* vs 2017**

Region	2018		2017		% Change
	Cases	Deaths	Cases	Deaths	
PHILIPPINES	1,281	6	3,118	22	↓59
I	0	0	3	0	↓100
II	0	0	0	0	0
III	0	0	0	0	0
IV-A	9	1	121	0	↓93
MIMAROPA	6	0	118	4	↓95
V	472	5	1,243	9	↓62
VI	1	0	10	0	↓90
VII	2	0	371	2	↓99
VIII	0	0	18	1	↓100
IX	0	0	3	0	↓100
X	147	0	701	6	↓79
XI	15	0	4	0	↑275
XII	0	0	3	0	↓100
ARMM	2	0	4	0	↓50
CAR	2	0	0	0	-
CARAGA	625	0	517	0	↑21
NCR	0	0	2	0	↓100

*From the period of January 1 to August 25, 2018

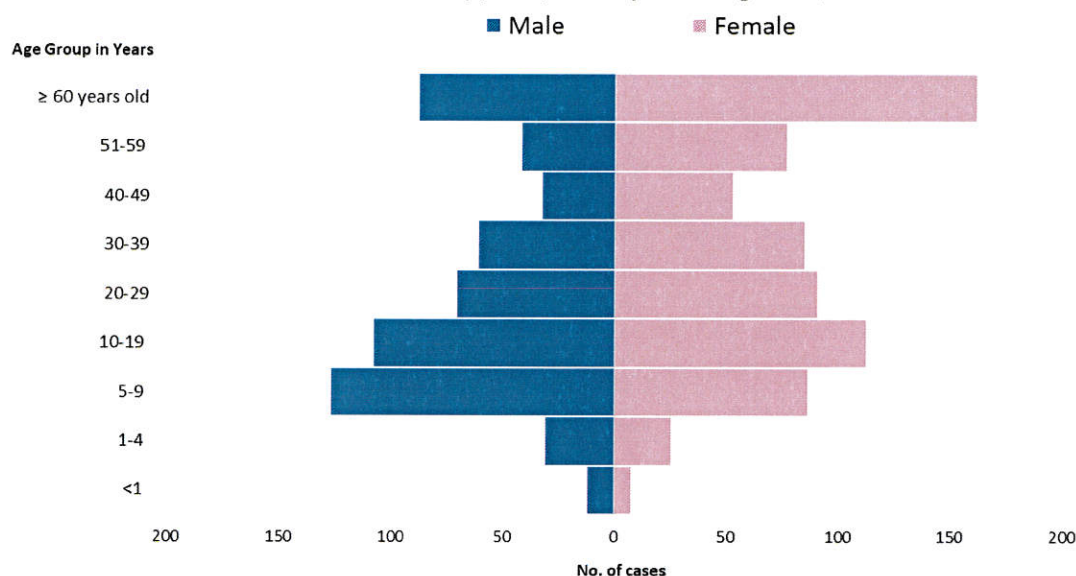
**From the period of January 1 to August 25, 2017



Profile of Cases

Majority of the suspect cases were female (705, 55%). Age of suspect cases ranged from 1 month to 95 years old (median age of 27 years). The most affected age groups were 60 years and above (250, 20%), 10 to 19 years (221, 17%) and 5 to 9 years (214, 17%) (Figure 5).

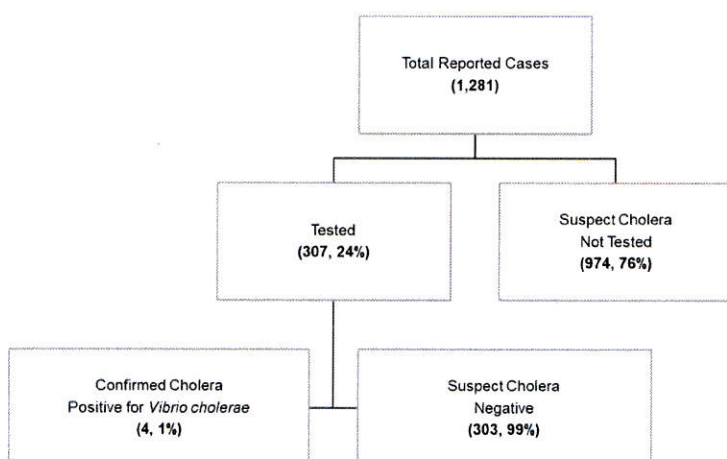
Figure 5. Reported Cholera Cases by Age Group and Sex (N=1,281)
Philippines, January 1 to August 25, 2018



Laboratory Results

A total of 307 (24%) specimens were tested (Figure 6). Of these, 303 (99%) were negative and only 4 (1%) were positive for *Vibrio cholerae* (one *V. cholerae*, one *V. cholera* Ogawa, one *V. cholera* Ogawa Biotype El Tor and one *V. cholera* 0139) (Table 5). Four laboratory confirmed were cases reported one each from regions VI, VII, X and XI (Figure 6).

Figure 6. Reported Cholera Cases by Laboratory Status (N=1,281) **Table 5. Laboratory Status of Cholera cases (N=1,281)**
Philippines, January to August 2018



Total Reported Cases	1,281
Tested	307 (24%)
Positive (stool culture)	4 (1%)
Vibrio cholerae	1 (25%)
Vibrio cholerae Ogawa	1 (25%)
Vibrio cholerae 0139	1 (25%)
Vibrio Cholerae Ogawa Biotype El Tor	1 (25%)
Negative	303 (99%)
Not Tested	974 (76%)

Profile of Deaths

There were six deaths (CFR=0.5%) out of the 1,281 reported cholera cases. All reported deaths were male (6, 100%). Ages of cases who died were: 6 years old, 8 years old, 20 years old, 39 years old, 58 years old and 77 years old. Among those who died, none was a confirmed cholera case.



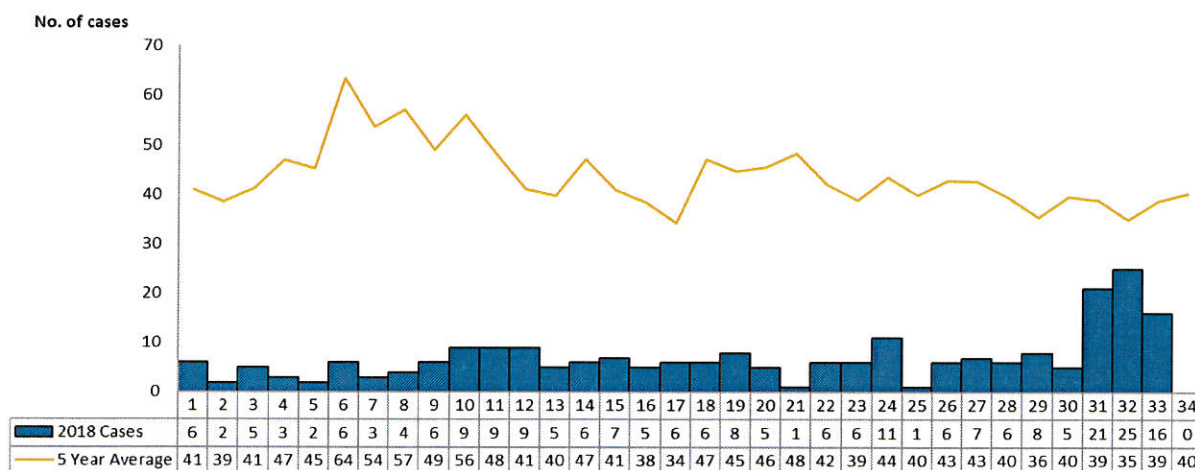
III. Hepatitis A

A. Reported Cases

Trend in the Philippines

A total of 976 reported acute viral hepatitis cases were reported nationwide from January 1 to August 25, 2018. The distribution of cases for 2018 compared to the 5-year average of cases from 2013-2017 is shown below (Figure 7).

Figure 7. Reported Acute Viral Hepatitis Cases by Morbidity Week (N=976)
Philippines, January 1 to August 25, 2018 vs 5 Year Average Data



*same time period

Geographical Distribution

There was a 32% decrease of reported acute viral hepatitis cases from 1,427 cases in 2017 to 976 cases in 2018. Most of the reported cases were from the following regions: Region VI (223, 23%), Region VII (175, 18%), NCR (105, 11%), Region X (103, 11%) and Region IV-A (83, 9%) (Table 6).

Table 6. Reported Acute Viral Hepatitis Cases & Deaths by Region (N=976)
Philippines, 2018* vs 2017**

Region	2018		2017		% Change
	Cases	Deaths	Cases	Deaths	
PHILIPPINES	976	4	1,427	18	↓32
I	27	1	46	0	↓41
II	18	0	25	0	↓28
III	46	0	42	1	↑10
IV-A	83	0	102	0	↓19
MIMAROPA	24	0	43	1	↓44
V	19	1	36	2	↓47
VI	223	0	223	1	0
VII	175	2	257	10	↓32
VIII	4	0	17	1	↓76
IX	36	0	64	0	↓44
X	103	0	128	0	↓20
XI	6	0	60	0	↓90
XII	15	0	41	0	↓63
ARMM	19	0	26	0	↓27
CAR	11	0	20	0	↓45
CARAGA	62	0	128	0	↓52
NCR	105	0	169	2	↓38

*From the period of January 1 to August 25, 2018

**From the period of January 1 to August 25, 2017

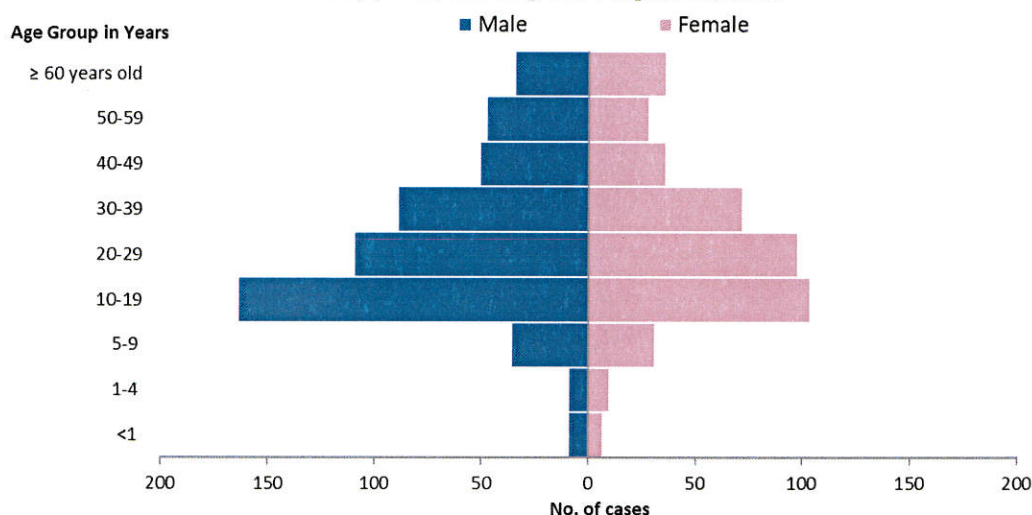


Profile of Cases

Age Group and Sex

Majority of the reported cases were male (551, 56%). Age of cases ranged from less than 1 month to 92 years old (median age of 25 years). Most of the cases were 10 to 19 years old (268, 27%) (Figure 8).

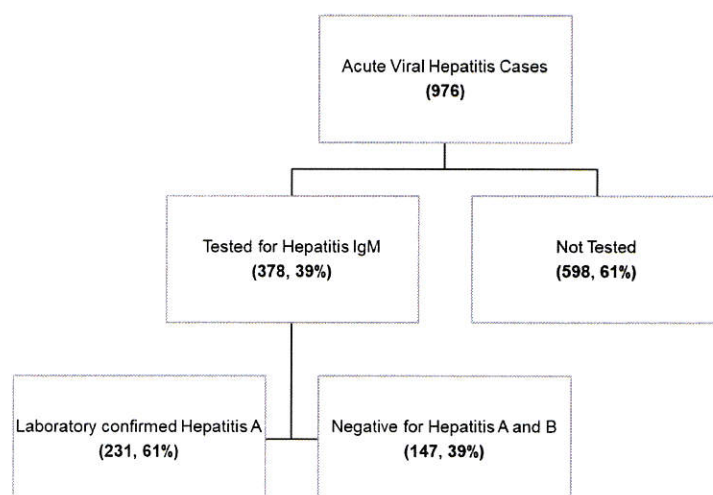
Figure 8. Acute Viral Hepatitis Cases by Age Group and Sex (N=976)
Philippines, January 1 to August 25, 2018



Laboratory Status

A total of 976 reported cases of Acute Viral Hepatitis in the Philippines from January 1 to August 25, 2018, 378 (39%) were tested for Hepatitis A IgM. Among those tested, 231 (61%) were positive for Hepatitis A (Figure 9).

Figure 9. Acute Viral Hepatitis Cases by Case Classification (N=976)
Philippines, January to August 2018



Profile of Deaths

Four deaths were reported (CFR=0.41%). Majority of the reported deaths were male (3, 75%). Age group of these deaths were 10 to 19 years (1, 25%), 40 to 49 years (2, 50%) and 60 and above (1, 25%).

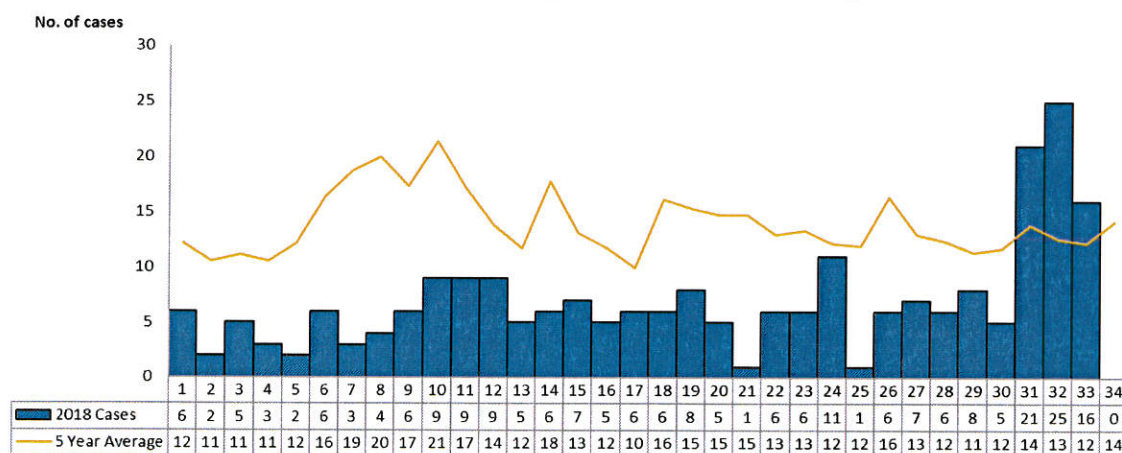


B. Confirmed Cases

Trend in the Philippines

A total of 976 Hepatitis A cases were reported nationwide from January 1 to August 25, 2018. Out of this, there were 231 confirmed Hepatitis A cases reported. In 2017, 358 confirmed Hepatitis A reported during the same time period. The distribution of cases for 2018 compared to the 5-year average of cases from 2013-2017 is shown below (Figure 10).

Figure 10. Confirmed Hepatitis A Cases by Morbidity Week (N=231)
Philippines, January 1 to August 25, 2018 vs 5 Year Average Data



*same time period

Geographical Distribution

Despite an increase in cases in 2018 compared to the 5-year average, there was a noted 35% decrease of confirmed Hepatitis A cases from 358 cases in 2017 to 231 cases in 2018 for the same period (January 1 to August 25, 2018). Most of the cases were from the following regions: Region VI (87, 38%), Region VII (59, 26%) and NCR (15, 6%) (Table 7). There were no reported deaths among cases.

Table 7. Confirmed Hepatitis A Cases & Deaths by Region (N=231)
Philippines, 2018* vs 2017**

Region	2018		2017		% Change
	Cases	Deaths	Cases	Deaths	
PHILIPPINES	231	0	358	1	↓35
I	1	0	14	0	↓93
II	8	0	1	0	↑700
III	2	0	13	1	↓85
IV-A	14	0	27	0	↓48
MIMAROPA	3	0	1	0	↑200
V	2	0	13	0	↓85
VI	87	0	49	0	↑78
VII	59	0	89	0	↓34
VIII	0	0	4	0	↓100
IX	12	0	22	0	↓45
X	8	0	44	0	↓82
XI	1	0	3	0	↓67
XII	2	0	13	0	↓85
ARMM	4	0	13	0	↓69
CAR	5	0	8	0	↓38
CARAGA	8	0	14	0	↓43
NCR	15	0	30	0	↓50

*From the period of January 1 to August 25, 2018

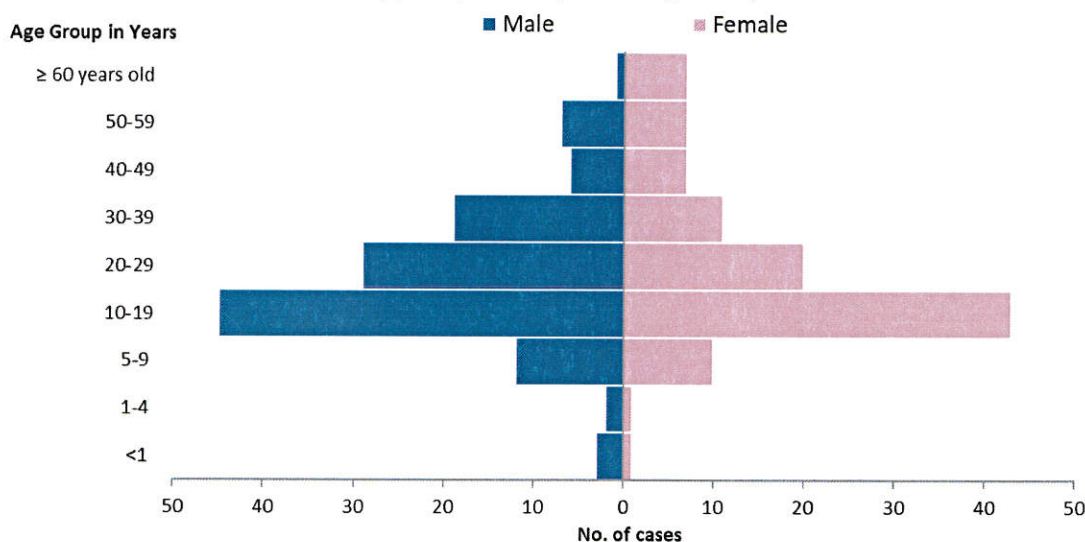
**From the period of January 1 to August 25, 2017



Profile of Cases

Majority of the cases were male (124, 54%). Age of cases ranged from less than 1 month to 82 years old (median age of 19 years). The most affected age group were from 10 to 19 years (88, 38%) (Figure 11).

Figure 11. Confirmed Hepatitis A Cases by Age Group and Sex (N=231)
Philippines, January 1 to August 25, 2018



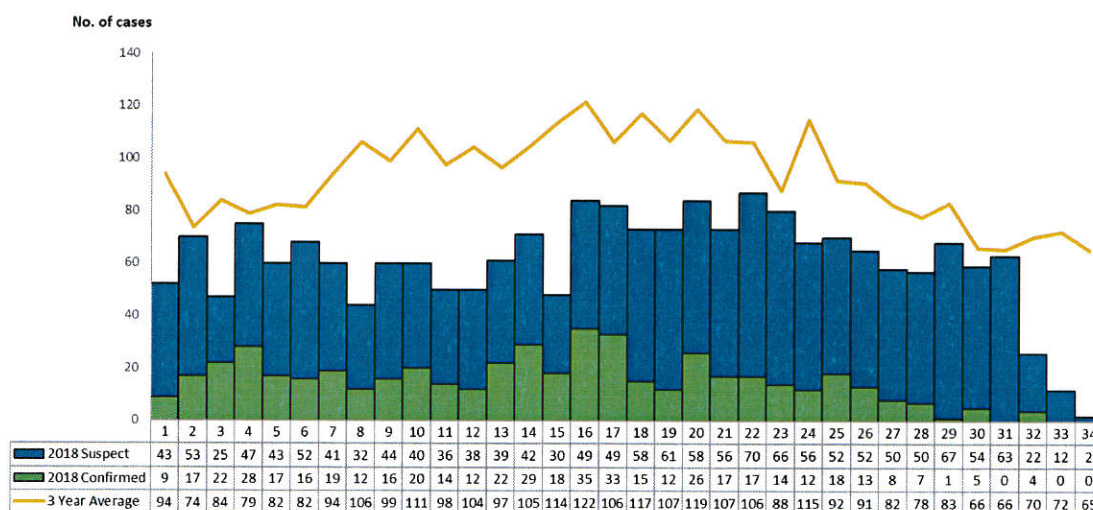
IV. Rotavirus

A. Reported Cases

Trend in the Philippines

A total of 2,060 reported rotavirus cases were reported nationwide from January 1 to August 25, 2018. The distribution of cases for 2018 compared to the 3-year average of cases from 2015-2017 is shown below (Figure 12).

Figure 12. Rotavirus Cases by Morbidity Week and Case Classification (N=2,060)
Philippines, January 1 to August 25, 2018 vs 3 Year Average Data



*same time period



Geographical Distribution

There was a 35% decrease of reported Rotavirus cases from 3,179 cases in 2017 to 2,060 cases in 2018. Most of the reported cases were from the following regions: Region I (456, 22%), ARMM (384, 19%), Region XII (335, 16%), Region V (270, 13%) and Region VI (236, 11%) (Table 8).

Table 8. Reported Rotavirus Cases & Deaths by Region (N=2,060)
Philippines, 2018* vs 2017**

Region	2018		2017		% Change
	Cases	Deaths	Cases	Deaths	
PHILIPPINES	2,060	16	3,179	35	↓35
I	456	4	719	16	↓37
II	1	0	0	0	-
III	3	0	1	0	↑200
IV-A	7	0	10	0	↓30
MIMAROPA	174	0	167	1	↑4
V	270	0	204	0	↑32
VI	236	0	530	7	↓55
VII	1	0	2	0	↓50
VIII	0	0	0	0	0
IX	0	0	0	0	0
X	1	0	0	0	-
XI	0	0	2	0	↓100
XII	335	2	533	6	↓37
ARMM	384	10	520	5	↓26
CAR	0	0	0	0	0
CARAGA	33	0	269	0	↓88
NCR	159	0	222	0	↓28

*From the period of January 1 to August 25, 2018

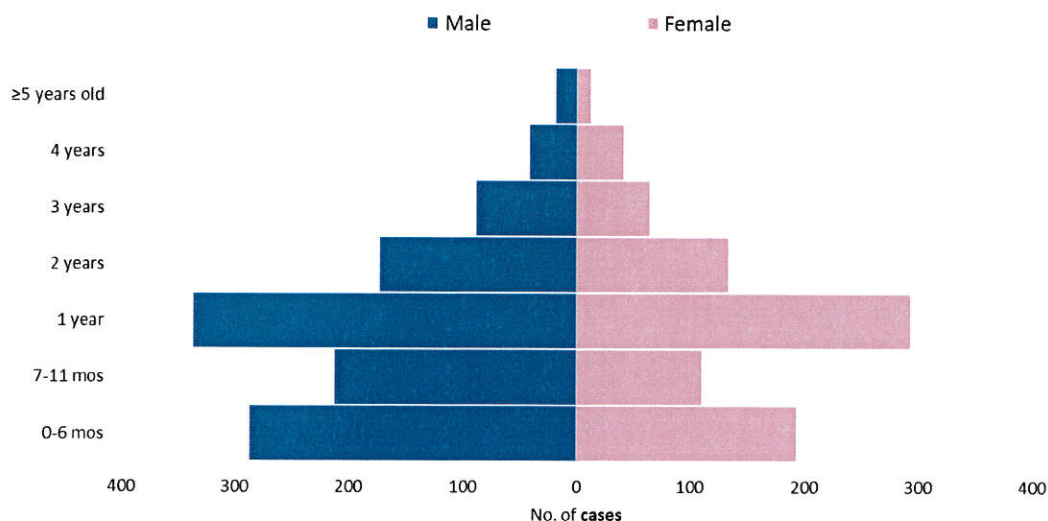
**From the period of January 1 to August 25, 2017

Profile of Cases

Age Group and Sex

Majority of the reported cases were male (1,192, 58%). Age of cases ranged from less than 1 month to 14 years old (median age of 1 year). Most of the cases were 1 year old (632, 31%) (Figure 13).

Figure 13. Reported Rotavirus Cases by Age Group and Sex (N=2,060)
Philippines, January 1 to August 25, 2018

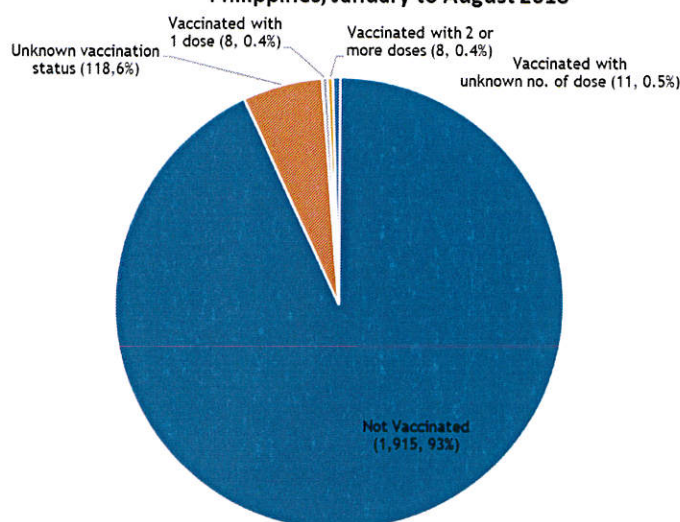




Vaccination Status

Majority of the reported cases were not vaccinated with rotavirus (1,915, 93%) (Figure 14).

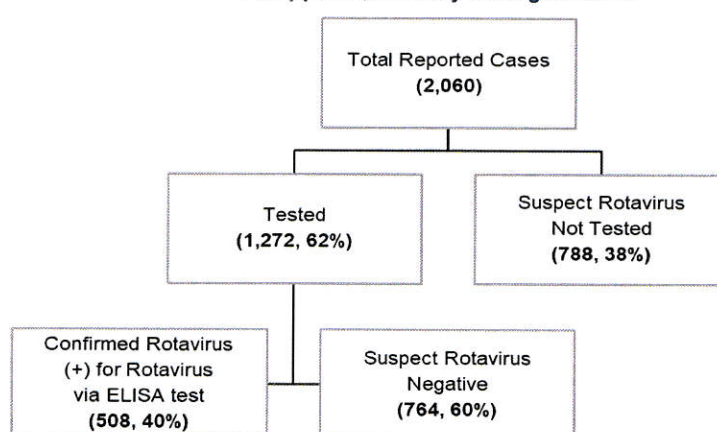
Figure 14. Vaccination Status of Reported Rotavirus Cases (N=2,060)
Philippines, January to August 2018



Laboratory Results

A total of 1,272 (62%) samples were collected for laboratory testing. Of these, 508 (40%) were laboratory confirmed for rotavirus and 764 (60%) were negative (Figure 15).

Figure 15. Reported Rotavirus Cases by Laboratory Status (N=2,060)
Philippines, January to August 2018



Profile of Deaths

Sixteen deaths were reported (CFR=0.78%). Majority of the reported deaths were female (9, 56%). Age group of these deaths were : less than 1 month to 6 months (2, 13%), 7 to 11 months (4, 25%), 1 year (4, 25%), 2 years (1, 6%), 3 years (3, 19%) and 4 years (1, 6%) and 5 and above (1, 6%). Majority of the reported deaths were female (9, 56%).



B. Confirmed Cases

Geographical Distribution

There was a 58% decrease of confirmed Rotavirus cases from 1,222 cases in 2017 to 508 cases in 2018. Most of the reported cases were from the following regions: Region I (168, 33%), Region VI (86, 17%), ARMM (71, 14%), Region XII (63, 12%) and Region V (53, 10%) (Table 9).

Table 9. Confirmed Rotavirus Cases & Deaths by Region (N=508)
Philippines, 2018* vs 2017**

Region	2018		2017		% Change
	Cases	Deaths	Cases	Deaths	
PHILIPPINES	508	0	1,222	3	↓58
I***	168	0	343	1	↓51
II	1	0	0	0	-
III	2	0	1	0	↑100
IV-A	3	0	5	0	↓40
MIMAROPA***	2	0	65	0	↓97
V***	53	0	56	0	↓5
VI***	86	0	261	1	↓67
VII	0	0	2	0	↓100
VIII	0	0	0	0	0
IX	0	0	0	0	0
X	0	0	0	0	0
XI	0	0	2	0	↓100
XII***	63	0	151	0	↓58
ARMM	71	0	115	1	↓38
CAR	0	0	0	0	0
CARAGA***	10	0	146	0	↓93
NCR***	49	0	75	0	↓35

*From the period of January 1 to August 25, 2018

**From the period of January 1 to August 25, 2017

***Region with selected rotavirus sentinel sites



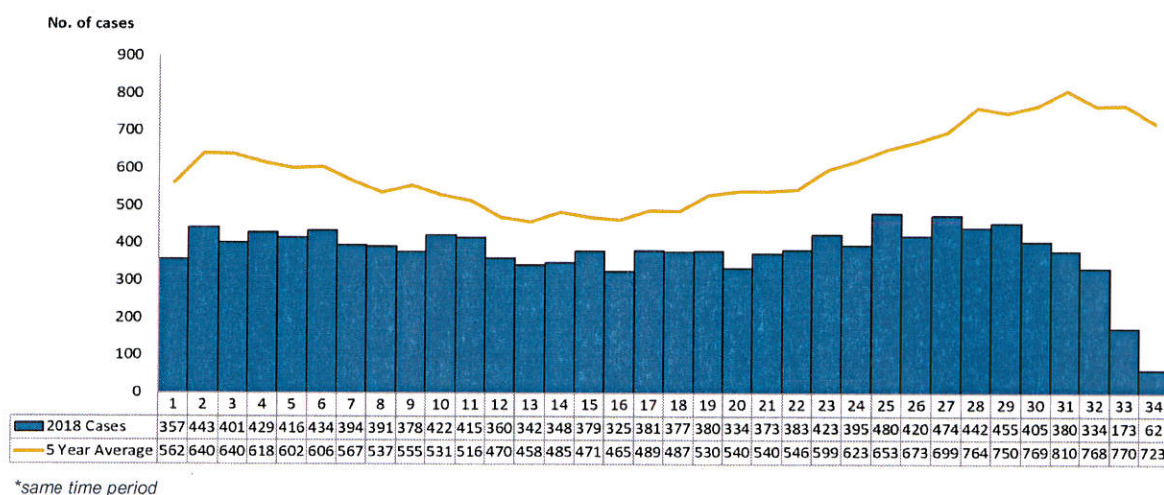
V. Typhoid Fever

A. Reported Cases

Trend in the Philippines

A total of 12,905 reported typhoid fever cases were reported nationwide from January 1 to August 25, 2018. The distribution of cases for 2018 compared to the 5-year average of cases from 2013-2017 is shown below (Figure 16).

Figure 16. Reported Typhoid Fever Cases by Morbidity Week (N=12,905)
Philippines, January 1 to August 25, 2018 vs 5 Year Average Data



Geographical Distribution

There was a 22% decrease of reported typhoid fever cases from 16,469 cases in 2017 to 12,905 cases in 2018. Most of the reported cases were from the following regions: Region X (2,595, 20%), Region VI (1,495, 12%), Region IV-A (1,131, 9%), Region XII (1,122, 9%) and CAR (1,116, 9%) (Table 10)

Table 10. Reported Typhoid Fever Cases & Deaths by Region (N=12,905)
Philippines, 2018* vs 2017**

Region	2018		2017		% Change
	Cases	Deaths	Cases	Deaths	
PHILIPPINES	12,905	22	16,469	29	↓22
I	485	0	919	1	↓47
II	237	0	568	1	↓58
III	366	0	518	0	↓29
IV-A	1,131	0	1,293	0	↓13
MIMAROPA	209	0	264	1	↓21
V	217	2	288	1	↓25
VI	1,495	2	1,469	4	↑2
VII	791	5	987	8	↓20
VIII	498	2	388	2	↑28
IX	728	3	1,247	4	↓42
X	2,595	0	3,349	0	↓23
XI	126	0	160	0	↓21
XII	1,122	2	1,625	0	↓31
ARMM	968	1	863	6	↑12
CAR	1,116	0	1,494	1	↓25
CARAGA	544	0	738	0	↓26
NCR	277	5	299	0	↓7

*From the period of January 1 to August 25, 2018

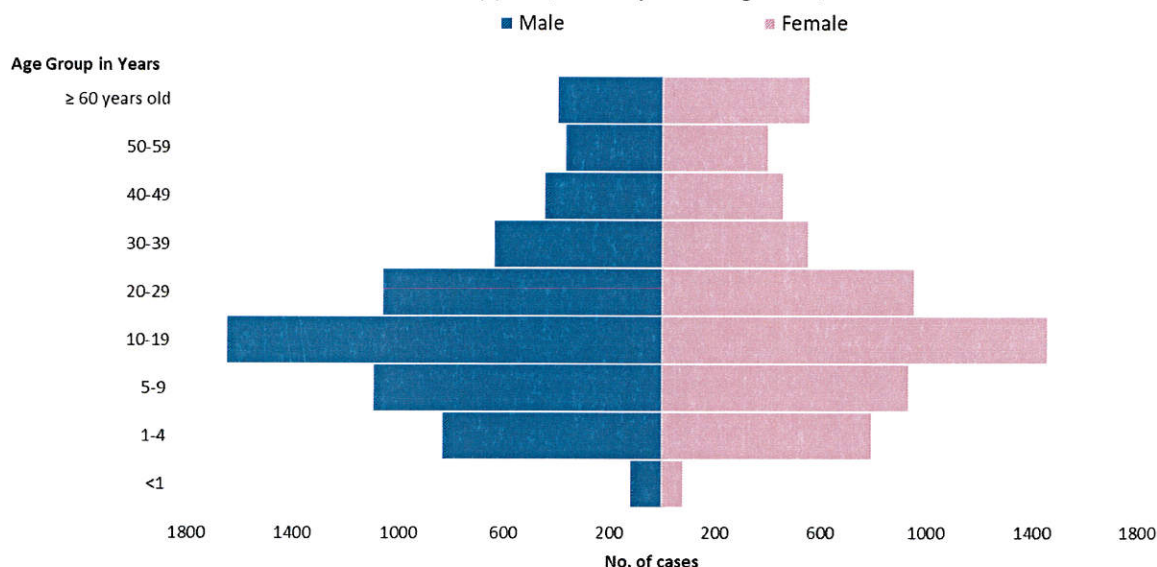
**From the period of January 1 to August 25, 2017



Profile of Cases

Majority of the reported cases were male (6,679, 52%). Age of cases ranged from less than 1 month to 98 years old (median age of 17 years). The most affected age group were from 10 to 19 years old (3,113, 24%) (Figure 17).

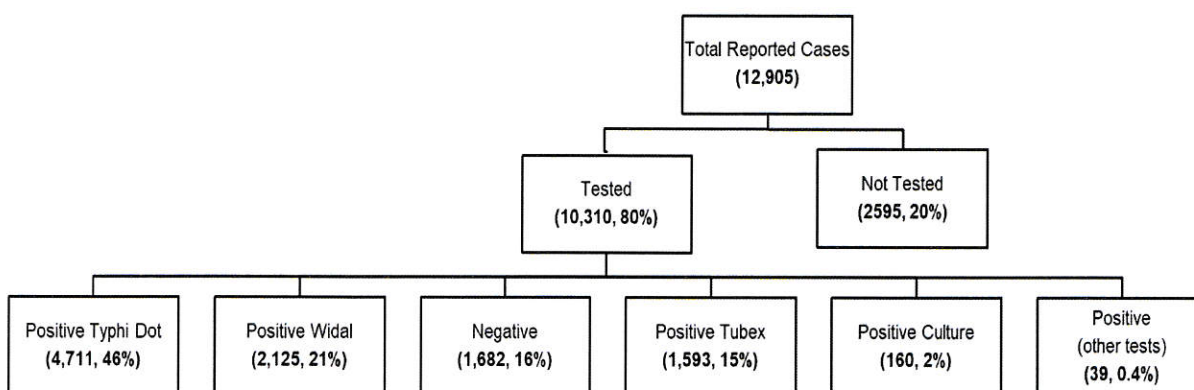
Figure 17. Reported Typhoid Fever Cases by Age Group and Sex (N=12,905)
Philippines, January 1 to August 25, 2018



Laboratory Results

A total of 10,310 (80%) specimens were referred for testing. Laboratory status of reported typhoid fever cases is shown below (Figure 18).

Figure 18. Reported Typhoid Fever Cases by Laboratory Status (N=12,905)
Philippines, January to August 2018



Profile of Deaths

There were 22 deaths (CFR=0.17%) out of the 12,905 reported typhoid fever cases. Twelve (12) reported deaths were male (55%). Age of deaths ranged from 2 to 83 years old (median age of 24 years). Age group of these deaths were: 1 to 4 years (1, 5%), 5 to 9 years (1, 5%), 10 to 19 years (7, 32%), 20 to 29 years (3, 14%), 30 to 39 (3, 14%), 50 to 59 years (3, 14%) and 60 years and above (4, 18%).