



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 September 29, 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	14,064	17	0.12	15,779	↓11
Confirmed Cholera	7	0	0.00	124	↓94
Confirmed Rotavirus	550	0	0.00	1,273	↓57
Hepatitis A	267	0	0.00	386	↓31
Typhoid Fever	15,921	25	0.16	19,182	↓17

PIDSR Case Definition for Food and Waterborne Diseases

Acute Bloody Diarrhea (ABD)	
Reported Case	▪ A person with acute diarrhea with visible blood in the stool.
Cholera	
Suspected Case	▪ 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	▪ 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	▪ 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	▪ A suspected case that has been laboratory-confirmed as Rotavirus.
Hepatitis A	
Suspected Case	▪ 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	▪ A suspected case that is laboratory confirmed (positive for IgM anti-HAV).
Typhoid Fever	
Suspected Case	▪ 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	▪ A suspected case that is epidemiologically linked to a confirmed case in an outbreak.
Confirmed Case	▪ A suspected or probable case that is laboratory confirmed. (Isolation of <i>Salmonella enterica</i> from blood, stool, or other clinical specimen)

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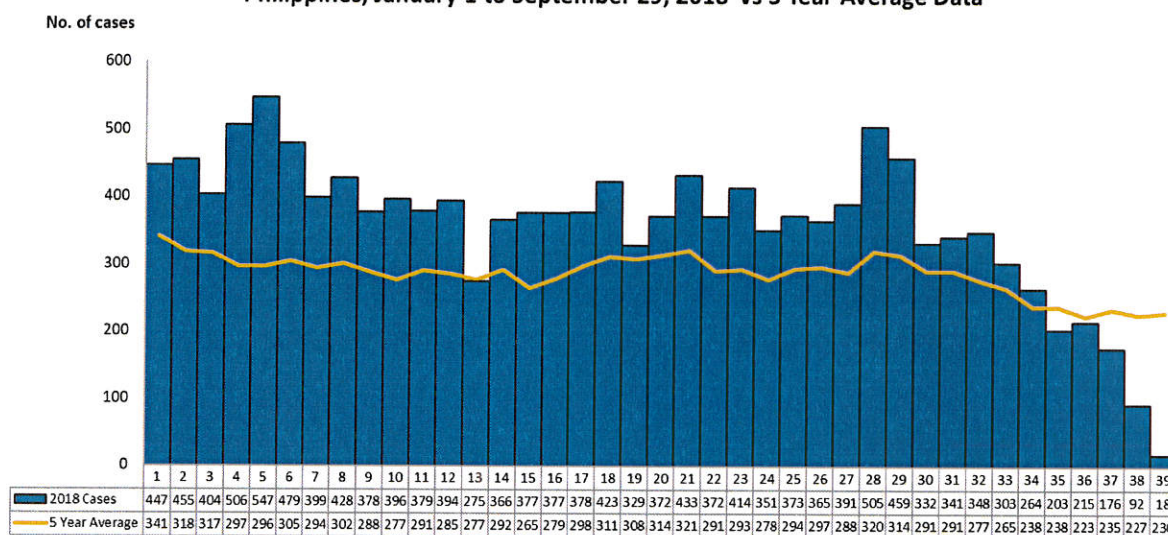


I. Acute Bloody Diarrhea (ABD)

Trend in the Philippines

A total of 14,064 acute bloody diarrhea cases were reported nationwide from January 1 to September 29, 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=14,064)
Philippines, January 1 to September 29, 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 11% decrease of reported ABD cases from 15,779 cases in 2017 to 14,064 cases in 2018 for the same period (January 1 to September 29, 2018). Most of the reported cases were from the following regions: Region VII (5,280, 38%), CARAGA (2,105, 15%), Region IX (1,675, 12%), CAR (1,236, 9%), and Region X (963, 7%) (Table 2).

Table 2. Acute Bloody Diarrhea Cases & Deaths (N=14,064)
Philippines, 2018* vs 2017**

Region	2018		2017		% Change
	Cases	Deaths	Cases	Deaths	
PHILIPPINES	14,064	17	15,779	46	↓11
I	70	0	94	0	↓26
II	593	0	1,130	0	↓48
III	526	0	316	0	↑66
IV-A	720	0	604	2	↑19
MIMAROPA	109	0	107	0	↑2
V	24	0	62	0	↓61
VI	43	0	124	0	↓65
VII	5,280	14	5,455	35	↓3
VIII	275	0	436	1	↓37
IX	1,675	1	1,270	3	↑32
X	963	0	1,098	1	↓12
XI	117	0	265	2	↓56
XII	139	0	248	0	↓44
ARMM	131	1	148	1	↓11
CAR	1,236	0	1,383	1	↓11
CARAGA	2,105	1	2,941	0	↓28
NCR	58	0	98	0	↓41

*From the period of January 1 to September 29, 2018

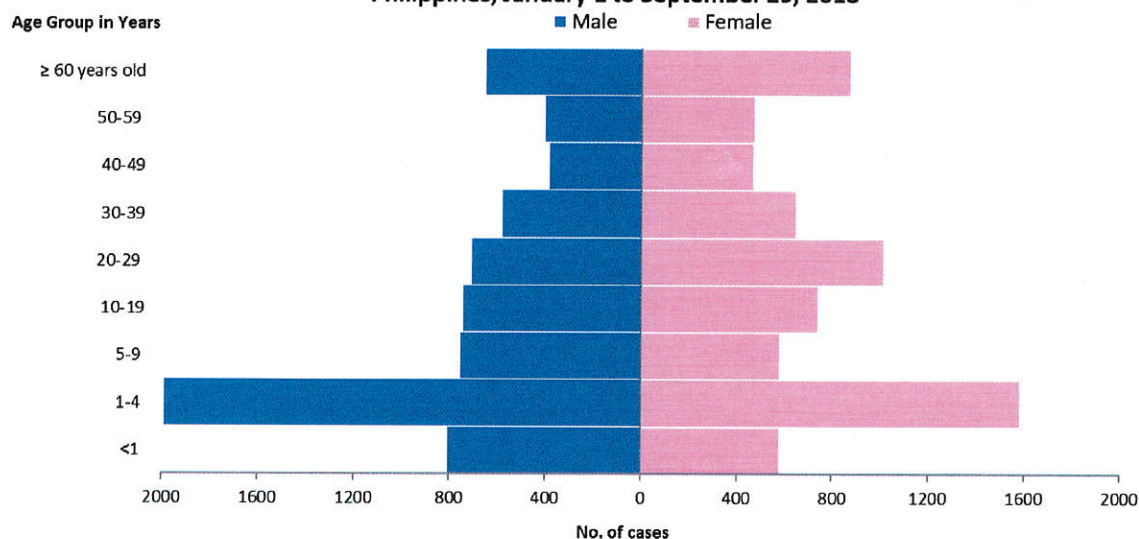
**From the period of January 1 to September 29, 2017



Profile of Cases

Majority of the reported ABD cases were male (7,073, 50.3%). Age of cases ranged from less than 1 month to 98 years old (median age of 14 years). The most affected age group was 1 year to 4 years (3,578, 25%) (Figure 2).

Figure 2. Acute Bloody Diarrhea Cases by Age Group and Sex (N=14,064)
Philippines, January 1 to September 29, 2018



Laboratory Results

A total of 8,787 (62%) samples were collected for laboratory testing (Figure 3). Of these, 7,579 (86%) were tested for different organisms. The frequently identified organism was *Entamoeba histolytica* (6,562, 87%) (Table 3).

Figure 3. ABD Cases by Laboratory Status (N=14,064)
Philippines, January to September 2018

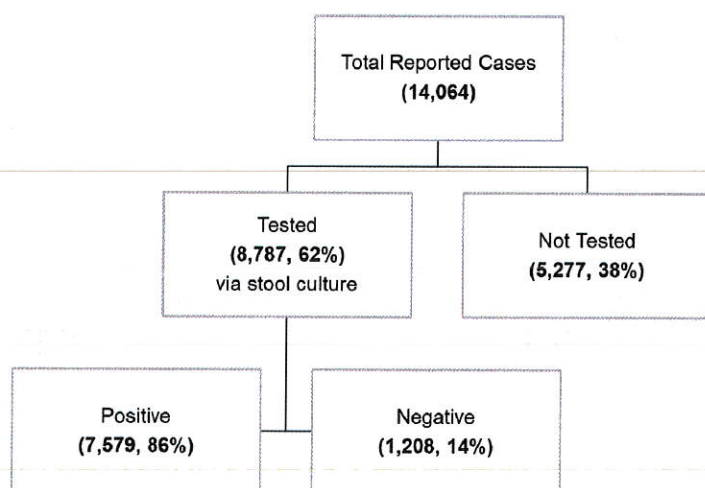


Table 3. Top 3 Organisms in ABD Cases*
Philippines, January to September 2018

Organism	Cases
<i>Entamoeba histolytica</i>	6,562
<i>Escherichia Coli</i>	288
<i>Trophozoites</i>	262

*multiple results and tested via stool culture

Profile of Deaths

There were seventeen (17) deaths (CFR=0.12%) out of the 14,064 reported ABD cases. Majority of the reported deaths were male (12, 71%). Age of deaths ranged from 7 months old to 73 years old (median age of 43 years). Age groups of these deaths were : less than 1 year (1, 6%), 1 to 4 years (3, 18%), 5 to 9 years (2, 12%), 10 to 19 years (1, 6%), 30 to 39 years (1, 6%), 40 to 49 years (1, 6%), 50 to 59 years (4, 23%) and 60 years and above (4, 23%).

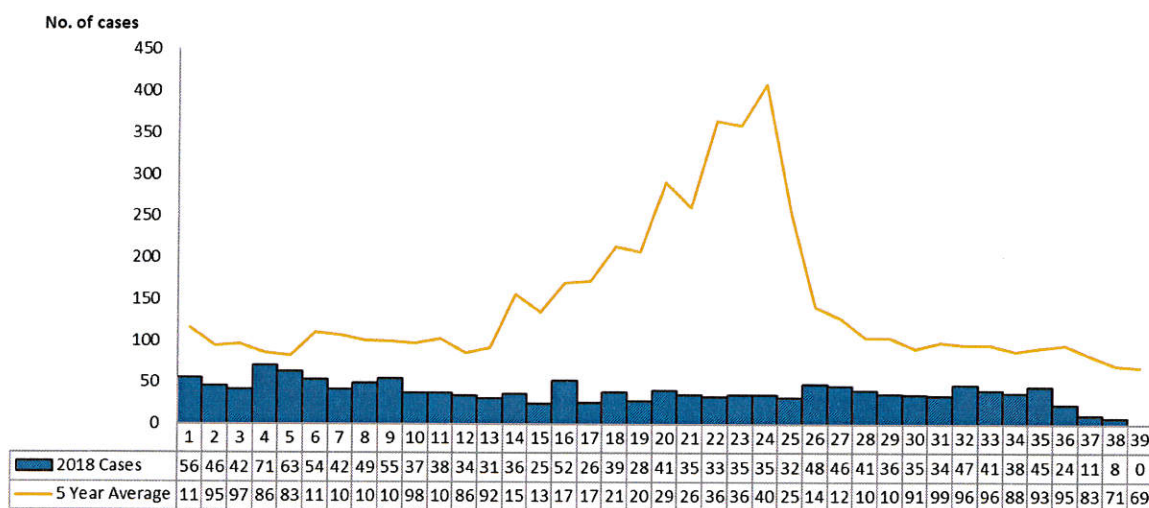


II. Cholera

Trend in the Philippines

A total of 1,489 reported cholera cases were reported nationwide from January 1 to September 29, 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=1,489)
Philippines, January 1 to September 29, 2018 vs 5 Year Average Data



*same time period

Geographical Distribution

There was a 57% decrease of reported cholera cases from 3,457 cases in 2017 to 1,489 cases in 2018. Most of the reported cases were from the following regions: CARAGA (772, 52%), Region V (527, 35%), Region X (149, 10%), Region XI (15, 1%) and Region IV-A (11, 1%) (Table 4). There were six deaths (CFR of 0.4%) reported from Regions IV-A and V.

Table 4. Reported Cholera Cases & Deaths by Region (N=1,489)
Philippines, 2018* vs 2017**

Region	2018		2017		% Change
	Cases	Deaths	Cases	Deaths	
PHILIPPINES	1,489	6	3,457	23	↓57
I	0	0	3	0	↓100
II	0	0	0	0	0
III	0	0	0	0	0
IV-A	11	1	121	0	↓91
MIMAROPA	6	0	270	4	↓98
V	527	5	1,318	9	↓60
VI	1	0	10	0	↓90
VII	2	0	372	2	↓99
VIII	0	0	18	1	↓100
IX	0	0	4	0	↓100
X	149	0	749	6	↓80
XI	15	0	5	0	↑200
XII	0	0	3	0	↓100
ARMM	3	0	5	0	↓40
CAR	3	0	0	0	0
CARAGA	772	0	576	1	↑34
NCR	0	0	3	0	↓100

*From the period of January 1 to September 29, 2018

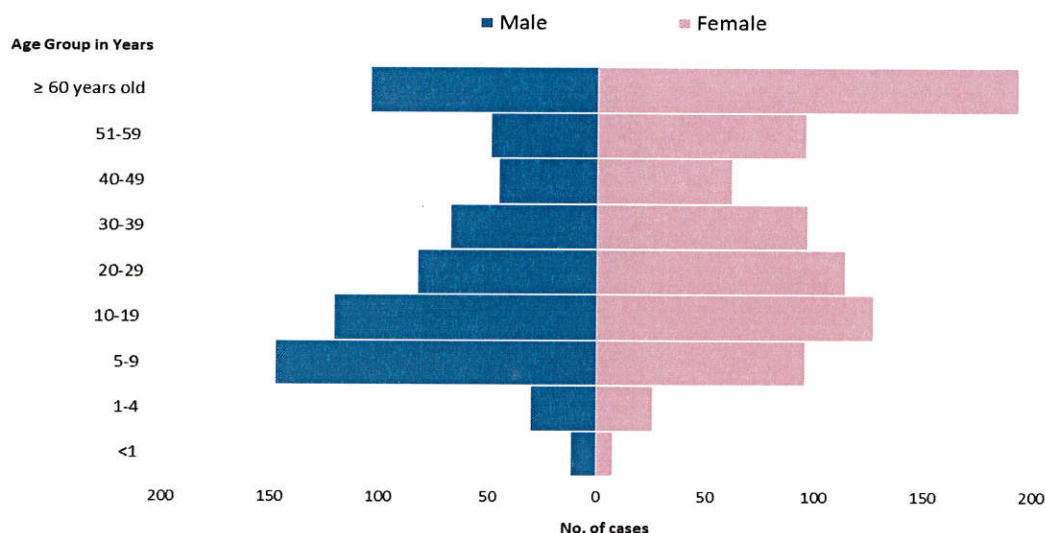
**From the period of January 1 to September 29, 2017



Profile of Cases

Majority of the reported cases were female (822, 55%). Age of suspect cases ranged from 1 month to 95 years old (median age of 28 years). The most affected age groups were 60 years and above (298, 20%), 10 to 19 years (248, 17%) and 5 to 9 years (244, 16%) (Figure 5).

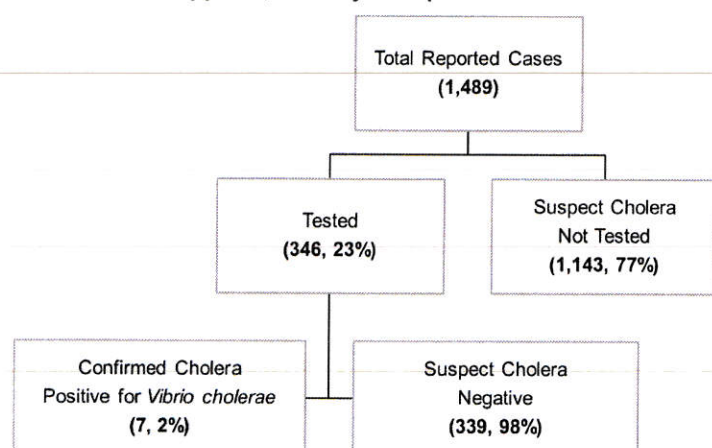
Figure 5. Reported Cholera Cases by Age Group and Sex (N=1,489)
Philippines, January 1 to September 29, 2018



Laboratory Results

A total of 346 (23%) specimens were tested (Figure 6). Of these, 339 (98%) were negative and only 7 (2%) were positive for *Vibrio cholerae* (one *V. cholerae*, two *V. cholera* Ogawa, one *V. cholera* Ogawa Biotype El Tor and three *V. cholera* 0139) (Table 5). Seven laboratory confirmed cases were reported from regions IV-A (2,29%), VI (1,14%), VII (1,14%), X (1,14%), XI (1,14%) and ARMM (1, 14%) (Figure 6).

Figure 6. Reported Cholera Cases by Laboratory Status (N=1,489) **Table 5. Laboratory Status of Cholera cases (N=1,489)**
Philippines, January to September 2018



Total Reported Cases	1,489
Tested	346 (23%)
Positive (stool culture)	7 (2%)
<i>Vibrio cholerae</i>	1 (14%)
<i>Vibrio cholerae</i> Ogawa	2 (29%)
<i>Vibrio cholerae</i> 0139	3 (43%)
<i>Vibrio Cholerae</i> Ogawa Biotype El Tor	1 (14%)
Negative	339 (98%)
Not Tested	1,143 (77%)

Profile of Deaths

There were six deaths (CFR=0.4%) out of the 1,489 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.



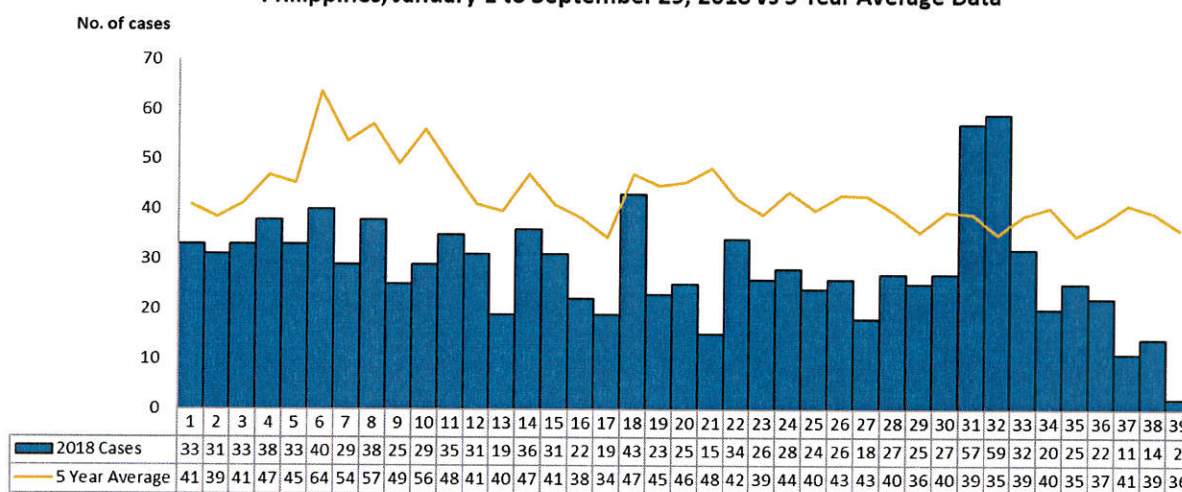
III. Hepatitis A

A. Reported Cases

Trend in the Philippines

A total of 1,105 reported acute viral hepatitis cases were reported nationwide from January 1 to September 29, 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. Acute Viral Hepatitis Cases by Morbidity Week (N=1,105)
Philippines, January 1 to September 29, 2018 vs 5 Year Average Data



*same time period

Geographical Distribution

There was a 29% decrease of reported acute viral hepatitis cases from 1,565 cases in 2017 to 1,105 cases in 2018. Most of the reported cases were from the following regions: Region VI (242, 22%), Region VII (209, 19%), NCR (119, 11%), Region X (105, 10%) and Region IV-A (93, 8%) (Table 6).

Table 6. Reported Acute Viral Hepatitis Cases & Deaths by Region (N=1,105)
Philippines, 2018* vs 2017**

Region	2018		2017		% Change
	Cases	Deaths	Cases	Deaths	
PHILIPPINES	1,105	10	1,565	20	↓29
I	32	1	47	0	↓32
II	20	0	27	0	↓26
III	55	0	50	1	↑10
IV-A	93	0	111	0	↓16
MIMAROPA	26	0	49	1	↓47
V	19	1	44	3	↓57
VI	242	0	245	1	↓1
VII	209	8	281	10	↓26
VIII	5	0	18	1	↓72
IX	47	0	71	0	↓34
X	105	0	137	0	↓23
XI	11	0	63	0	↓83
XII	18	0	48	0	↓63
ARMM	24	0	29	0	↓17
CAR	11	0	20	0	↓45
CARAGA	69	0	138	1	↓50
NCR	119	0	187	2	↓36

*From the period of January 1 to September 29, 2018

**From the period of January 1 to September 29, 2017

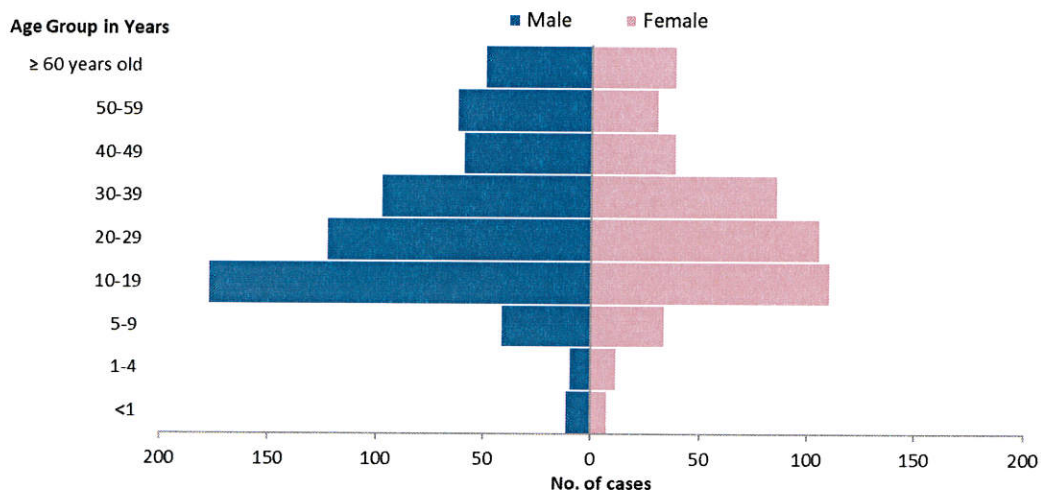


Profile of Cases

Age Group and Sex

Majority of the reported cases were male (636, 58%). 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 (289, 26%) (Figure 8).

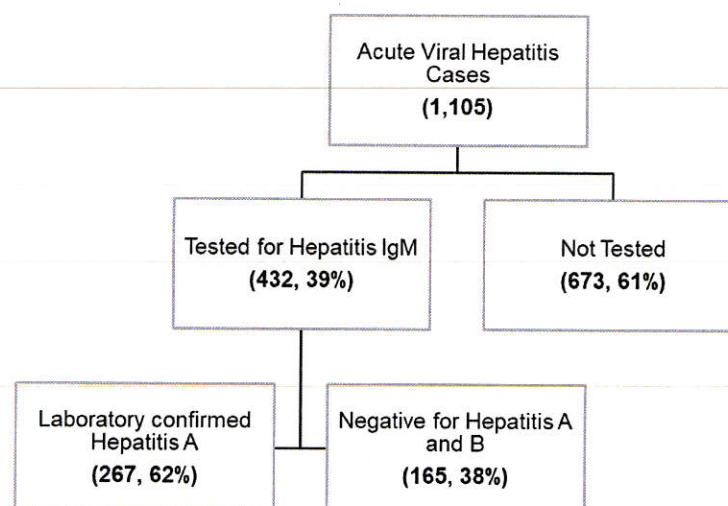
Figure 8. Acute Viral Hepatitis Cases by Age Group and Sex (N=1,105)
Philippines, January 1 to September 29, 2018



Laboratory Status

A total of 432 (39%) reported cases were tested for Hepatitis A IgM. Among those tested, 267 (62%) were positive for Hepatitis A (Figure 9).

Figure 9. Acute Viral Hepatitis Cases by Case Classification (N=1,105)
Philippines, January to September 2018



Profile of Deaths

Ten deaths were reported (CFR=0.90%). Majority of the reported deaths were male (9, 90%). Age group of these deaths were 10 to 19 years (1, 10%), 40 to 49 years (2, 20%), 51 to 59 (4, 40%) and 60 and above (3, 30%).

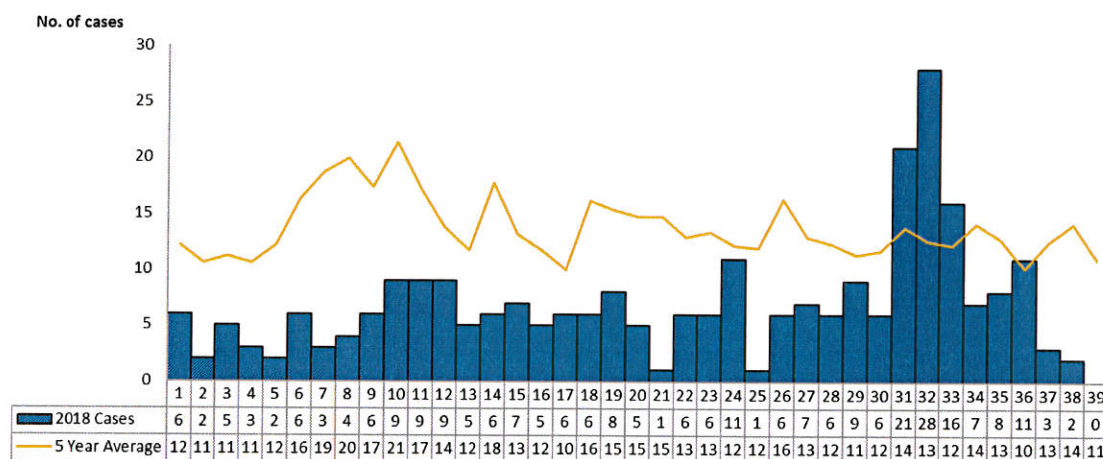


B. Confirmed Cases

Trend in the Philippines

A total of 1,105 acute viral cases were reported nationwide from January 1 to September 29, 2018. Out of this, there were 267 confirmed Hepatitis A cases reported. In 2017, 386 confirmed Hepatitis A were 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=267)
Philippines, January 1 to September 29, 2018 vs 5 Year Average Data



*same time period

Geographical Distribution

There was a 31% decrease of confirmed Hepatitis A cases from 386 cases in 2017 to 267 cases in 2018 for the same period (January 1 to September 29, 2018). Most of the cases were from the following regions: Region VI (96, 36%), Region VII (70, 26%), IV-A (19, 7%), NCR (17, 6%) and Region IX (15, 6%) (Table 7). There were no reported deaths among cases.

Table 7. Confirmed Hepatitis A Cases & Deaths by Region (N=267)
Philippines, 2018* vs 2017**

Region	2018		2017		% Change
	Cases	Deaths	Cases	Deaths	
PHILIPPINES	267	0	386	1	↓31
I	1	0	14	0	↓93
II	8	0	2	0	↑300
III	2	0	13	1	↓85
IV-A	19	0	28	0	↓32
MIMAROPA	3	0	1	0	↑200
V	2	0	13	0	↓85
VI	96	0	57	0	↑68
VII	70	0	98	0	↓29
VIII	1	0	4	0	↓75
IX	15	0	22	0	↓32
X	9	0	45	0	↓80
XI	1	0	3	0	↓67
XII	4	0	14	0	↓71
ARMM	4	0	14	0	↓71
CAR	5	0	8	0	↓38
CARAGA	10	0	14	0	↓29
NCR	17	0	36	0	↓53

*From the period of January 1 to September 29, 2018

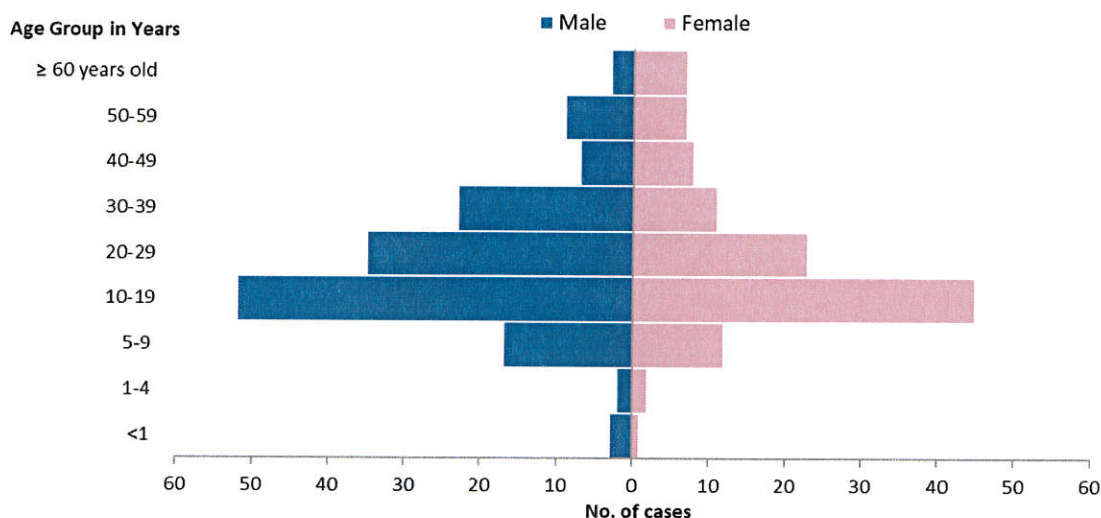
**From the period of January 1 to September 29, 2017



Profile of Cases

Majority of the cases were male (151, 57%). Age of cases ranged from less than 1 month to 82 years old (median age of 19 years). The most affected age group was 10 to 19 years (97, 36%) (Figure 11).

Figure 11. Hepatitis A Cases by Age Group and Sex (N=267)
Philippines, January 1 to September 29, 2018



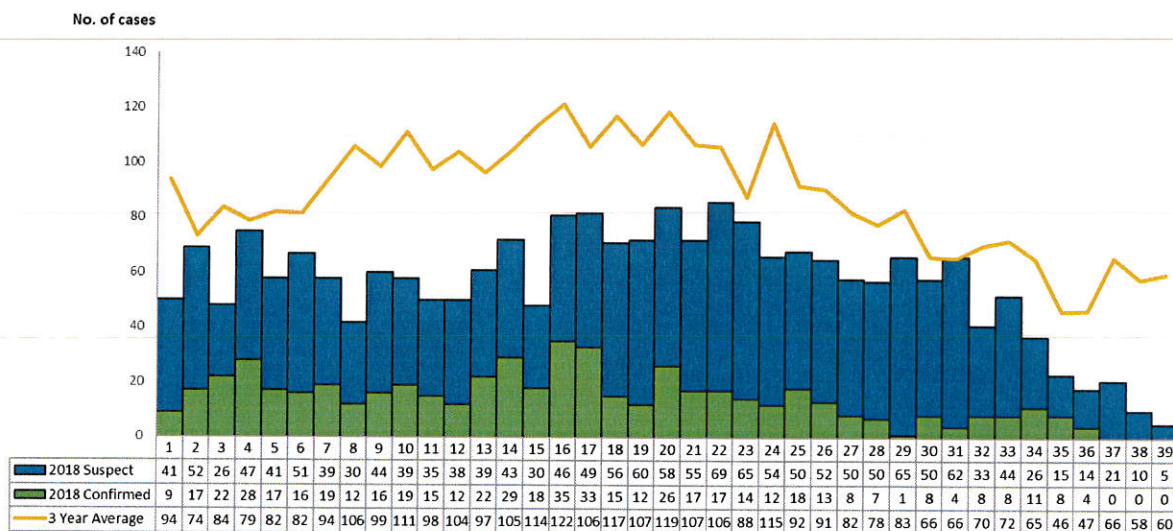
IV. Rotavirus

A. Reported Cases

Trend in the Philippines

A total of 2,204 reported rotavirus cases were reported nationwide from January 1 to September 29, 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=2,204)
Philippines, January 1 to September 29, 2018 vs 3 Year Average Data



*same time period



Geographical Distribution

There was a 36% decrease of reported Rotavirus cases from 3,427 cases in 2017 to 2,204 cases in 2018. Most of the reported cases were from the following regions: Region I (505, 23%), ARMM (407, 18%), Region XII (347, 16%), Region V (276, 13%) and Region VI (271, 12%) (Table 8).

Table 8. Reported Rotavirus Cases & Deaths by Region (N=2,204)
Philippines, 2018* vs 2017**

Region	2018		2017		% Change
	Cases	Deaths	Cases	Deaths	
PHILIPPINES	2,204	17	3,427	37	↓36
I	505	5	760	18	↓34
II	0	0	0	0	0
III	4	0	1	0	↑300
IV-A	7	0	10	0	↓30
MIMAROPA	175	0	167	1	↑5
V	276	0	213	0	↑30
VI	271	0	574	7	↓53
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	347	3	594	6	↓42
ARMM	407	9	584	5	↓30
CAR	0	0	0	0	0
CARAGA	33	0	271	0	↓88
NCR	177	0	249	0	↓29

*From the period of January 1 to September 29, 2018

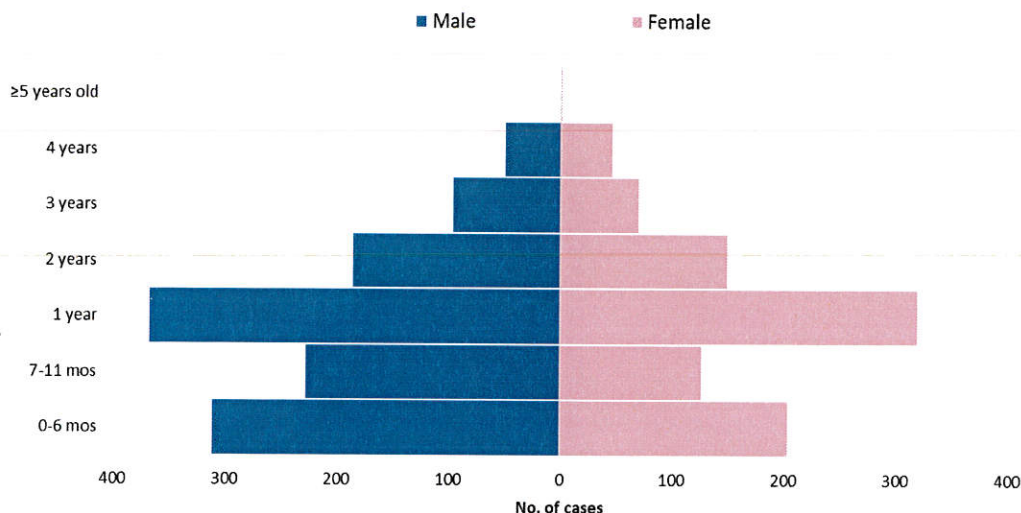
**From the period of January 1 to September 29, 2017

Profile of Cases

Age Group and Sex

Majority of the reported cases were male (1,271, 58%). Age of cases ranged from less than 1 month to 5 years old (median age of 1 year). Most of the cases were 1 year old (689, 31%) (Figure 13).

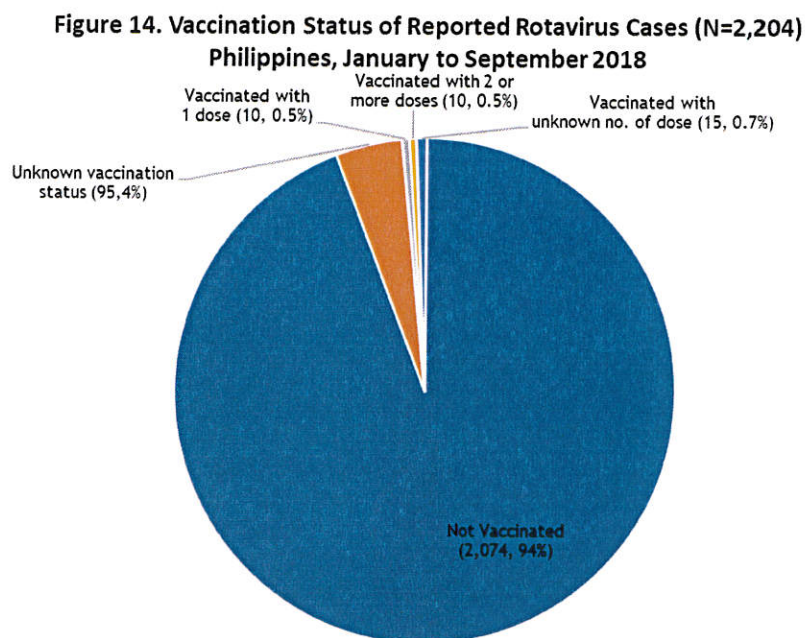
Figure 13. Reported Rotavirus Cases by Age Group and Sex (N=2,204)
Philippines, January 1 to September 29, 2018





Vaccination Status

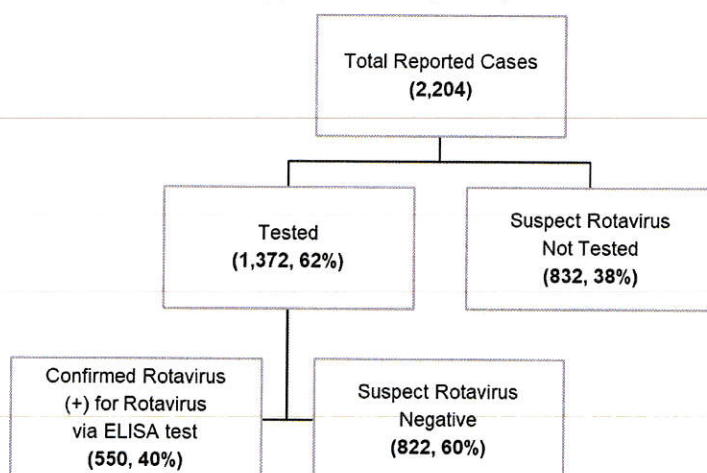
Majority of the reported cases were not vaccinated with rotavirus (2,074, 94%) (Figure 14).



Laboratory Results

A total of 1,372 (62%) samples were collected for laboratory testing. Of these, 550 (40%) were laboratory confirmed for rotavirus and 822 (60%) were negative (Figure 15).

Figure 15. Reported Rotavirus Cases by Laboratory Status (N=2,204)
Philippines, January to September 2018



Profile of Deaths

Seventeen deaths were reported (CFR=0.77%). Majority of the reported deaths were female (9, 53%). Age groups of these deaths were : less than 1 month to 6 months (2, 12%), 7 to 11 months (4, 24%), 1 year (5, 29%), 2 years (2, 12%), 3 years (3, 18%) and 4 years (1, 6%).



B. Confirmed Cases

Geographical Distribution

There was a 57% decrease of confirmed Rotavirus cases from 1,273 cases in 2017 to 550 cases in 2018. Most of the reported cases were from the following regions: Region I (192, 35%), Region VI (89, 16%), ARMM (74, 13%), Region XII (71, 13%) and Region V (54, 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	550	0	1,273	3	↓57
I***	192	0	343	1	↓44
II	0	0	0	0	0
III	3	0	1	0	↑200
IV-A	3	0	5	0	↓40
MIMAROPA***	2	0	65	0	↓97
V***	54	0	56	0	↓4
VI***	89	0	280	1	↓68
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***	71	0	162	0	↓56
ARMM	74	0	134	1	↓45
CAR	0	0	0	0	0
CARAGA***	10	0	147	0	↓93
NCR***	52	0	76	0	↓32

*From the period of January 1 to September 29, 2018

**From the period of January 1 to September 29, 2017

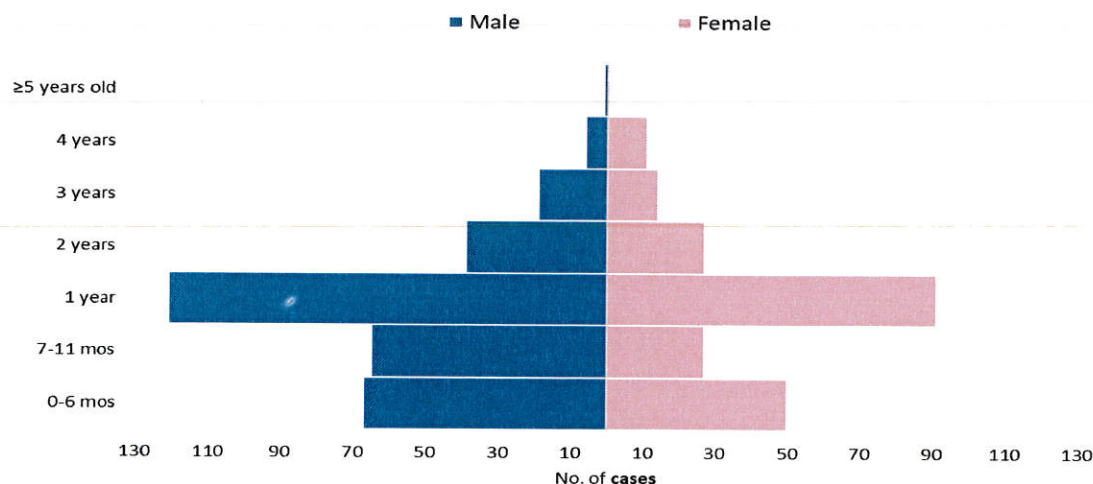
***Region with selected rotavirus sentinel sites

Profile of Cases

Age Group and Sex

Majority of the confirmed cases were male (326, 59%). Age of cases ranged from less than 1 month to 5 years old (median age of 1 year). Most of the cases were 1 year old (212, 39%) (Figure 16).

Figure 16. Confirmed Rotavirus Cases by Age group, Sex and Case Classification (n=550)
Philippines, January 1 to September 29, 2018



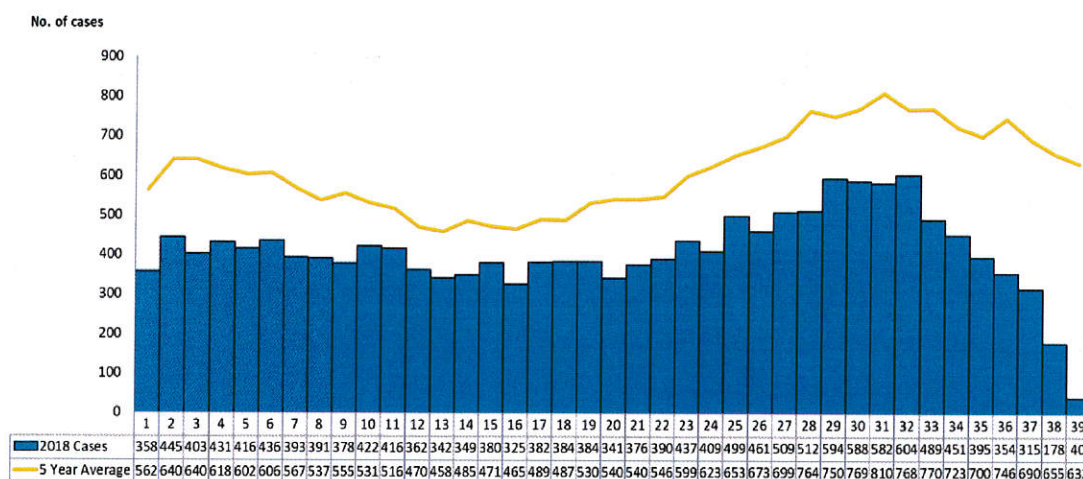


V. Typhoid Fever

Trend in the Philippines

A total of 15,921 reported typhoid fever cases were reported nationwide from January 1 to September 29, 2018. The distribution of cases for 2018 compared to the 5-year average of cases from 2013-2017 is shown below (Figure 17).

Figure 17. Reported Typhoid Fever Cases by Morbidity Week (N=15,921)
Philippines, January 1 to September 29, 2018 vs 5 Year Average Data



*same time period

Geographical Distribution

There was a 17% decrease of reported typhoid fever cases from 19,182 cases in 2017 to 15,921 cases in 2018. Most of the reported cases were from the following regions: Region X (3,283, 21%), Region VI (1,851, 12%), CAR (1,521, 10%), Region XII (1,324, 8%) and Region IV-A (1,321, 8%) (Table 10)

Table 10. Reported Typhoid Fever Cases & Deaths by Region (N=15,921)
Philippines, 2018* vs 2017**

Region	2018		2017		% Change
	Cases	Deaths	Cases	Deaths	
PHILIPPINES	15,921	25	19,182	31	↓17
I	605	0	1,100	1	↓45
II	298	0	631	1	↓53
III	420	0	605	0	↓31
IV-A	1,321	0	1,499	0	↓12
MIMAROPA	262	0	320	1	↓18
V	251	2	323	1	↓22
VI	1,851	3	1,732	4	↑7
VII	962	6	1,154	10	↓17
VIII	557	2	429	2	↑30
IX	878	3	1,438	4	↓39
X	3,283	1	3,899	0	↓16
XI	145	0	180	0	↓19
XII	1,324	2	1,922	0	↓31
ARMM	1,240	1	1,005	6	↑23
CAR	1,521	0	1,770	1	↓14
CARAGA	672	0	849	0	↓21
NCR	331	5	326	0	↑2

*From the period of January 1 to September 29, 2018

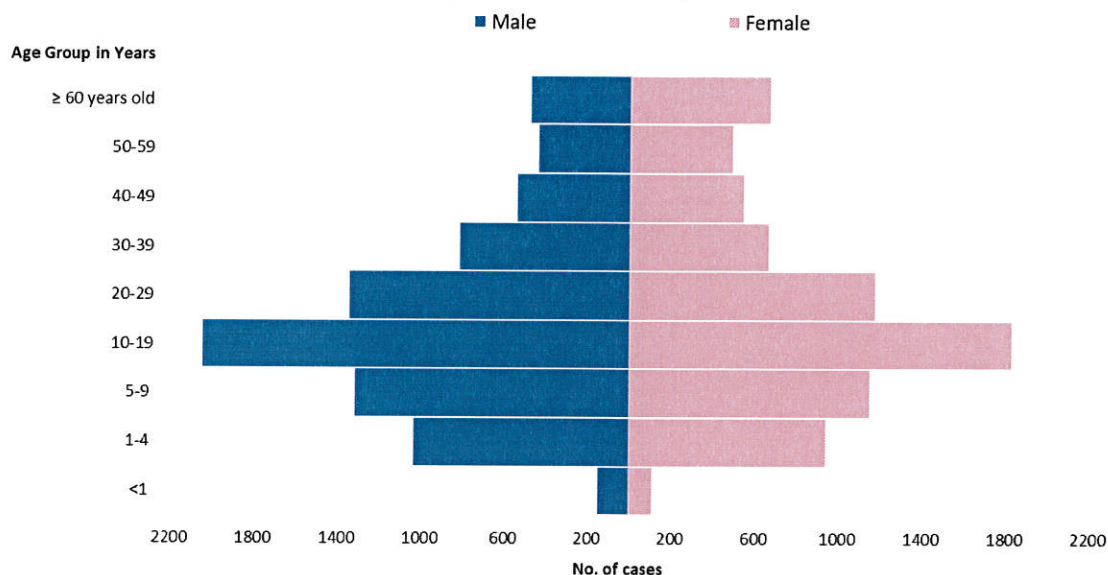
**From the period of January 1 to September 29, 2017



Profile of Cases

Majority of the reported cases were male (8,264, 52%). Age of cases ranged from less than 1 month to 98 years old (median age of 17 years). The most affected age group was 10 to 19 years old (3,886, 24%) (Figure 18).

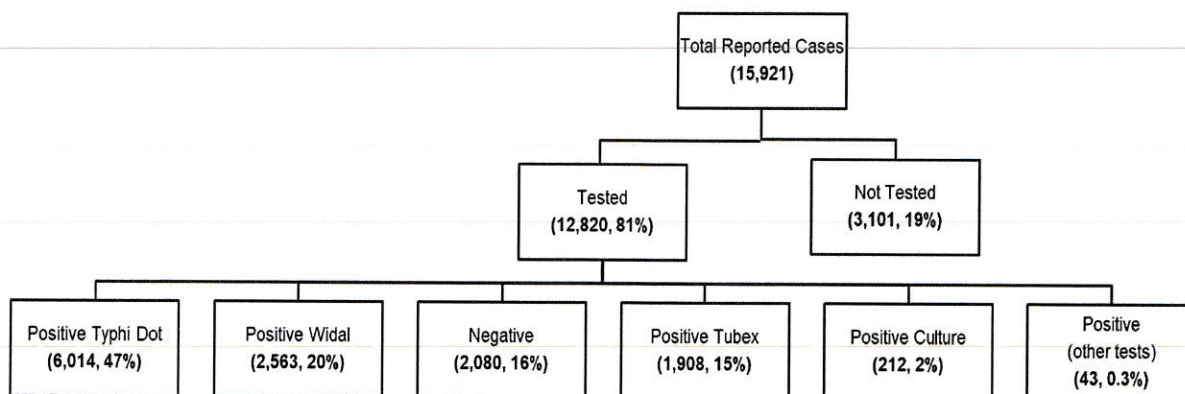
Figure 18. Reported Typhoid Fever Cases by Age Group and Sex (N=15,921)
Philippines, January 1 to September 29, 2018



Laboratory Results

A total of 12,820 (81%) specimens were referred for testing. Laboratory status of reported typhoid fever cases is shown below (Figure 19).

Figure 19. Reported Typhoid Fever Cases by Laboratory Status (N=15,921)
Philippines, January to September 2018



Profile of Deaths

There were 25 deaths (CFR=0.16%) out of the 15,921 reported typhoid fever cases. Fifteen (15) reported deaths were male (60%). Age of deaths ranged from 2 to 83 years old (median age of 25 years). Age group of these deaths were: 1 to 4 years (1, 4%), 5 to 9 years (1, 4%), 10 to 19 years (7, 28%), 20 to 29 years (4, 16%), 30 to 39 (4, 16%), 50 to 59 years (3, 12%) and 60 years and above (5, 20%).