



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 October 27, 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	15,491	18	0.12	16,949	↓9
Confirmed Cholera	7	0	0.00	125	↓94
Confirmed Rotavirus	635	1	0.16	1,310	↓52
Hepatitis A	280	0	0.00	412	↓32
Typhoid Fever	17,787	28	0.16	21,037	↓15

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	<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	▪ 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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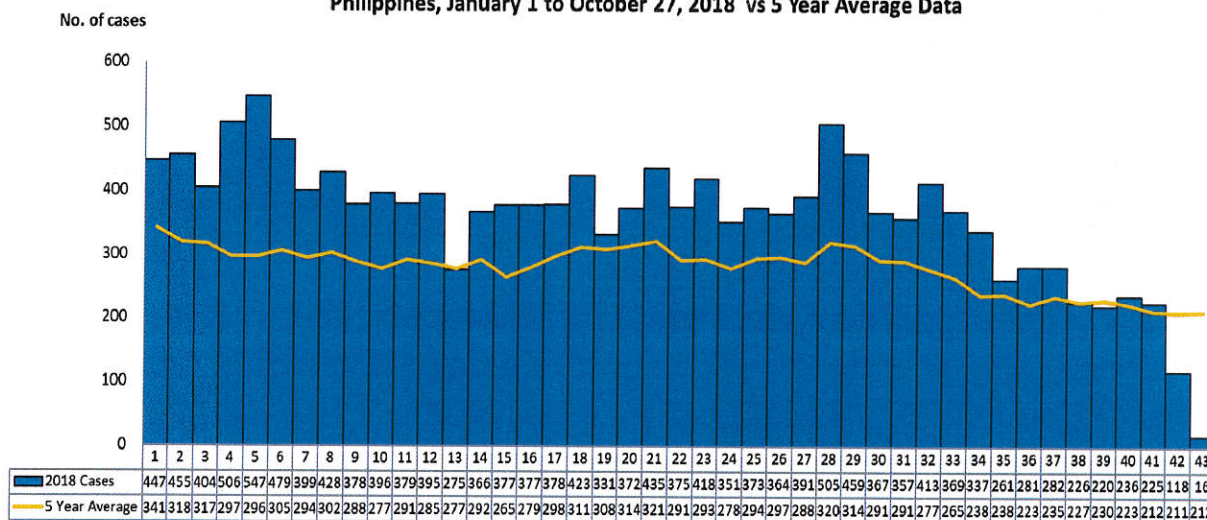


I. Acute Bloody Diarrhea (ABD)

Trend in the Philippines

A total of 15,491 acute bloody diarrhea cases were reported nationwide from January 1 to October 27, 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=15,491)
Philippines, January 1 to October 27, 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 9% decrease of reported ABD cases from 16,949 cases in 2017 to 15,491 cases in 2018 for the same period (January 1 to October 27, 2018). Most of the reported cases were from the following regions: Region VII (5,739, 37%), CARAGA (2,288, 15%), Region IX (2,089, 13%), CAR (1,350, 9%), and Region X (1,016, 7%) (Table 2).

Table 2. Acute Bloody Diarrhea Cases & Deaths (N=15,491)
Philippines, 2018* vs 2017**

Region	2018		2017		% Change
	Cases	Deaths	Cases	Deaths	
PHILIPPINES	15,491	18	16,949	47	↓9
I	72	0	97	0	↓26
II	628	0	1,265	1	↓50
III	559	0	346	0	↑62
IV-A	769	0	666	2	↑15
MIMAROPA	113	0	115	0	↓2
V	25	0	63	0	↓60
VI	51	0	139	0	↓63
VII	5,739	15	5,876	35	↓2
VIII	296	0	451	1	↓34
IX	2,089	1	1,397	3	↑50
X	1,016	0	1,173	1	↓13
XI	133	0	285	2	↓53
XII	156	0	257	0	↓39
ARMM	146	1	155	1	↓6
CAR	1,350	0	1,469	1	↓8
CARAGA	2,288	1	3,084	0	↓26
NCR	61	0	111	0	↓45

*From the period of January 1 to October 27, 2018

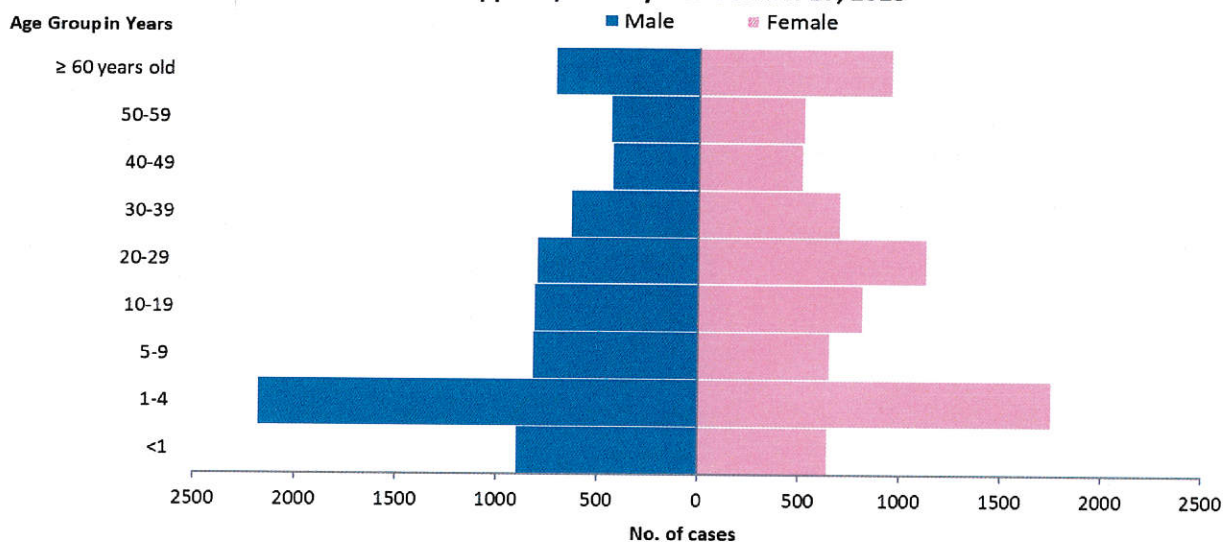
**From the period of January 1 to October 27, 2017



Profile of Cases

Majority of the reported ABD cases were male (7,761, 50.1%). 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 (3,941, 25%) (Figure 2).

Figure 2. Acute Bloody Diarrhea Cases by Age Group and Sex (N=15,491)
Philippines, January 1 to October 27, 2018



Laboratory Results

A total of 9,825 (63%) samples were collected for laboratory testing (Figure 3). Of these, 8,547 (87%) yielded positive for different organisms. The frequently identified organism was *Entamoeba histolytica* (7,243, 85%) (Table 3).

Figure 3. ABD Cases by Laboratory Status (N=15,491)
Philippines, January to October 2018

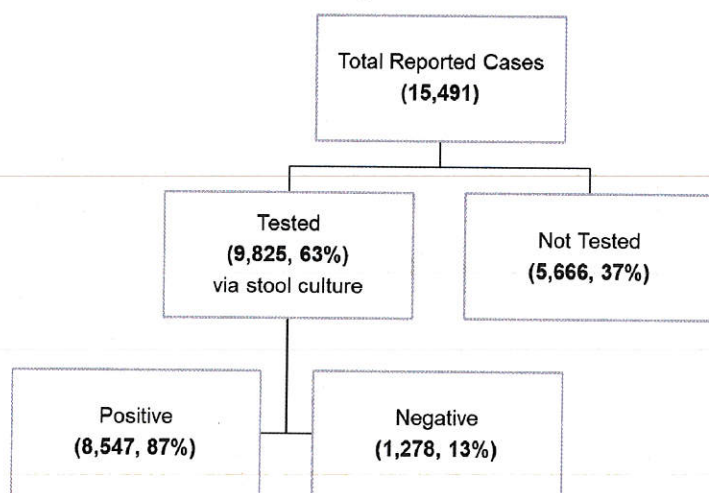


Table 3. Top 3 Organisms in ABD Cases*
Philippines, January to October 2018

Organism	Cases
<i>Entamoeba histolytica</i>	7,243
<i>Shigella</i>	427
<i>Escherichia Coli</i>	316

*multiple results and tested via stool culture

Profile of Deaths

There were eighteen (18) deaths (CFR=0.12%) out of the 15,491 reported ABD cases. Majority of the reported deaths were male (12, 67%). Age of deaths ranged from 7 months old to 73 years old (median age of 47 years). Age groups of these deaths were : less than 1 year (1, 5.5%), 1 to 4 years (3, 17%), 5 to 9 years (2, 11%), 10 to 19 years (1, 5.5%), 30 to 39 years (1, 5.5%), 40 to 49 years (1, 5.5%), 50 to 59 years (4, 22%) and 60 years and above (5, 28%).

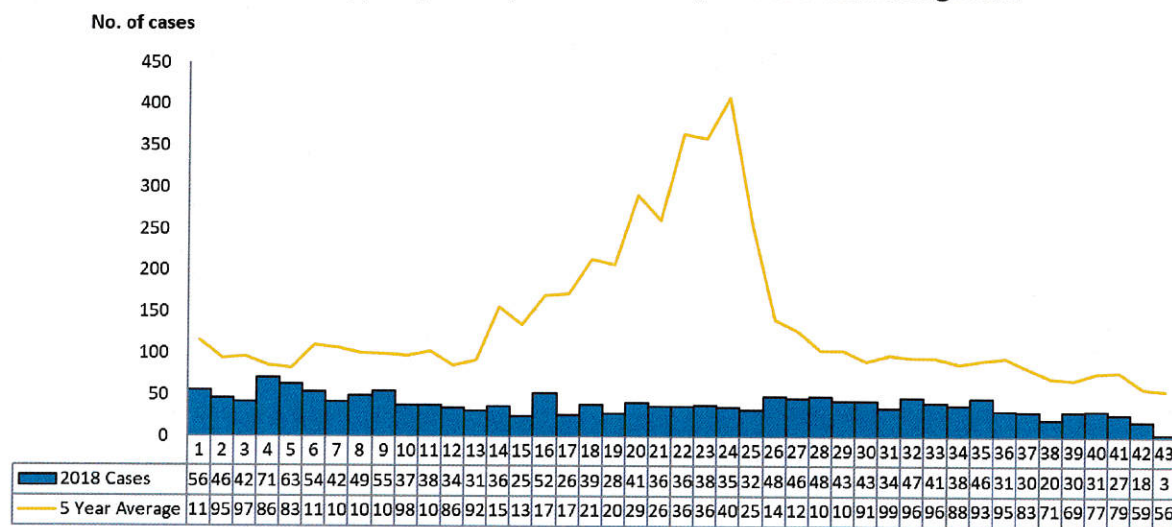


II. Cholera

Trend in the Philippines

A total of 1,666 reported cholera cases were reported nationwide from January 1 to October 27, 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=1,666)
Philippines, January 1 to October 27, 2018 vs 5 Year Average Data



*same time period

Geographical Distribution

There was a 53% decrease of reported cholera cases from 3,579 cases in 2017 to 1,666 cases in 2018. Most of the reported cases were from the following regions: CARAGA (895, 54%), Region V (576, 35%), Region X (153, 9%), 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=1,666)
Philippines, 2018* vs 2017**

Region	2018		2017		% Change
	Cases	Deaths	Cases	Deaths	
PHILIPPINES	1,666	6	3,579	23	↓53
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	272	4	↓98
V	576	5	1,386	9	↓58
VI	1	0	10	0	↓90
VII	2	0	373	2	↓99
VIII	0	0	18	1	↓100
IX	1	0	5	0	↓80
X	153	0	775	6	↓80
XI	15	0	5	0	↑200
XII	0	0	3	0	↓100
ARMM	3	0	6	0	↓50
CAR	3	0	1	0	↑200
CARAGA	895	0	598	1	↑50
NCR	0	0	3	0	↓100

*From the period of January 1 to October 27, 2018

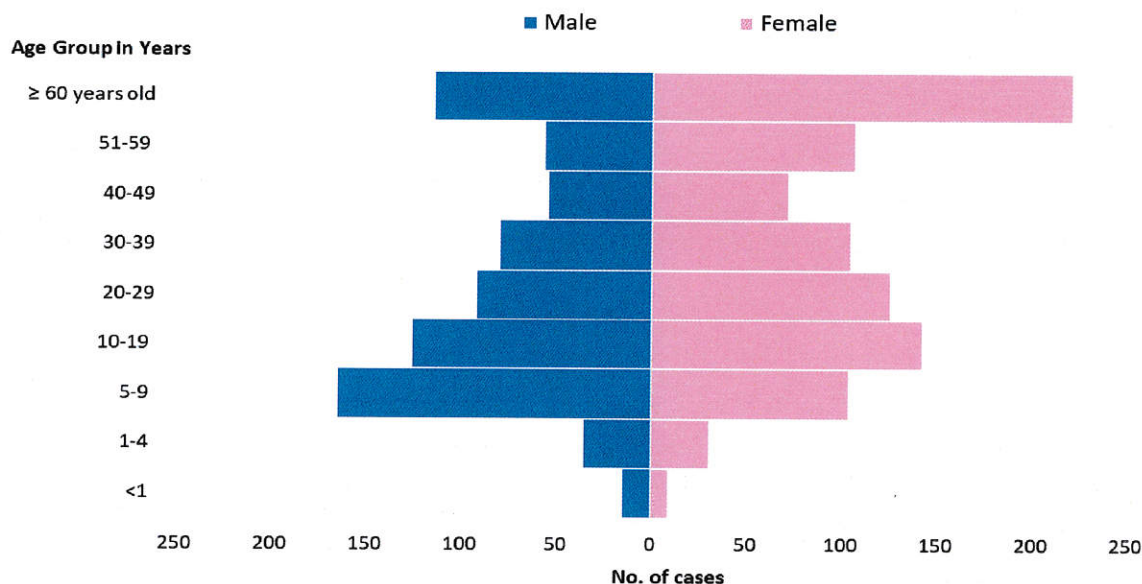
**From the period of January 1 to October 27, 2017



Profile of Cases

Majority of the reported cases were female (922, 55%). Age of suspect cases ranged from less than 1 month to 95 years old (median age of 29 years). The most affected age groups were 60 years and above (336, 20%), 10 to 19 years (269, 16%) and 5 to 9 years (269, 16%) (Figure 5).

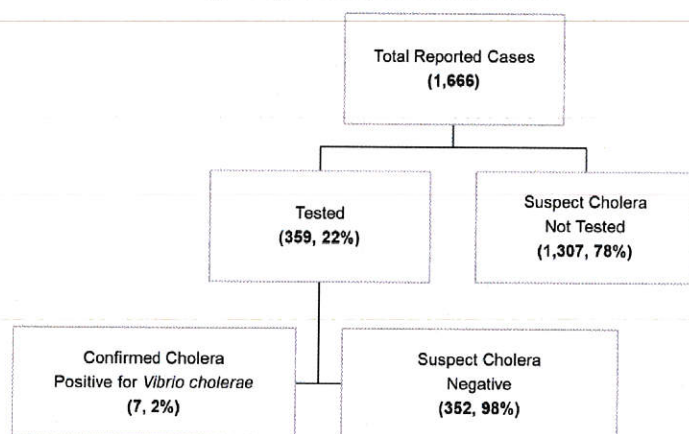
Figure 5. Reported Cholera Cases by Age Group and Sex (N=1,666)
Philippines, January 1 to October 27, 2018



Laboratory Results

A total of 359 (22%) specimens were tested (Figure 6). Of these, 352 (98%) were negative and only 7 (2%) were positive for *Vibrio cholerae* (one *V. cholerae*, two *V. cholerae* Ogawa, one *V. cholerae* Ogawa Biotype El Tor and three *V. cholerae* 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. Reported Cholera Cases by Laboratory Status (N=1,666) **Table 5. Laboratory Status of Cholera cases (N=1,666)**
Philippines, January to October 2018



Total Reported Cases	1,666
Tested	359 (22%)
Positive (stool culture)	7 (2%)
Vibrio cholerae	1 (14%)
Vibrio cholerae Ogawa	2 (29%)
Vibrio cholerae 0139	3 (43%)
Vibrio Cholerae Ogawa Biotype El Tor	1 (14%)
Negative	352 (98%)
Not Tested	1,307 (78%)

Profile of Deaths

There were six deaths (CFR=0.4%) out of the 1,666 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.



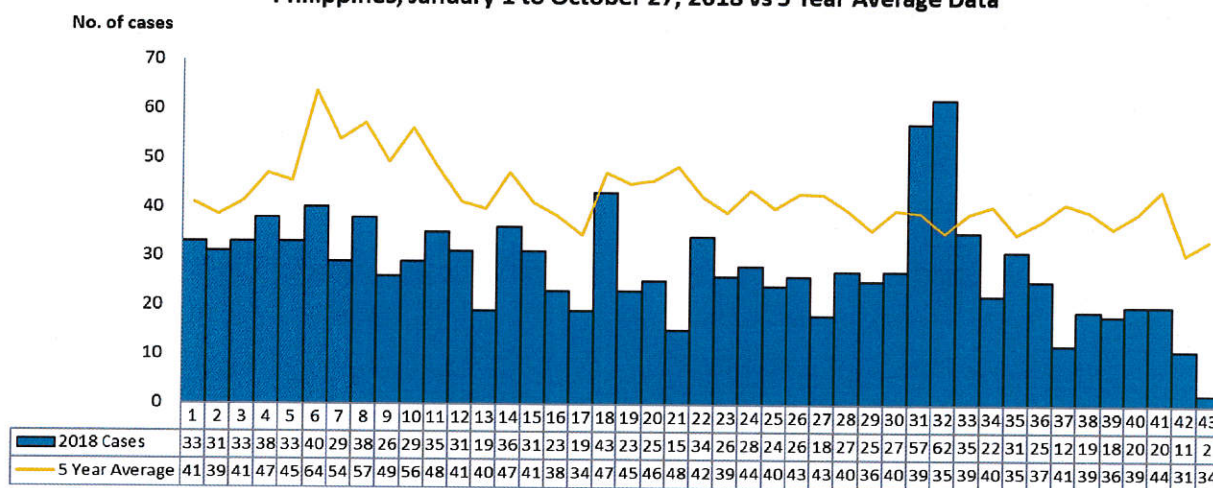
III. Hepatitis A

A. Reported Cases

Trend in the Philippines

A total of 1,199 reported acute viral hepatitis cases were reported nationwide from January 1 to October 27, 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=1,199)
Philippines, January 1 to October 27, 2018 vs 5 Year Average Data**



*same time period

Geographical Distribution

There was a 28% decrease of reported acute viral hepatitis cases from 1,671 cases in 2017 to 1,199 cases in 2018. Most of the reported cases were from the following regions: Region VI (258, 22%), Region VII (217, 18%), NCR (136, 11%), Region X (110, 9%) and Region IV-A (99, 8%) (Table 6).

**Table 6. Reported Acute Viral Hepatitis Cases & Deaths by Region (N=1,199)
Philippines, 2018* vs 2017****

Region	2018		2017		% Change
	Cases	Deaths	Cases	Deaths	
PHILIPPINES	1,199	11	1,671	21	↓28
I	31	1	49	0	↓37
II	20	0	30	0	↓33
III	62	0	59	2	↑5
IV-A	99	0	117	0	↓15
MIMAROPA	27	0	53	1	↓49
V	20	1	51	3	↓61
VI	258	0	263	1	↓2
VII	217	8	297	10	↓27
VIII	5	0	21	1	↓76
IX	60	0	73	0	↓18
X	110	0	142	0	↓23
XI	16	0	64	0	↓75
XII	19	0	53	0	↓64
ARMM	30	0	30	0	0
CAR	11	0	20	0	↓45
CARAGA	78	0	144	1	↓46
NCR	136	1	205	2	↓34

*From the period of January 1 to October 27, 2018

**From the period of January 1 to October 27, 2017

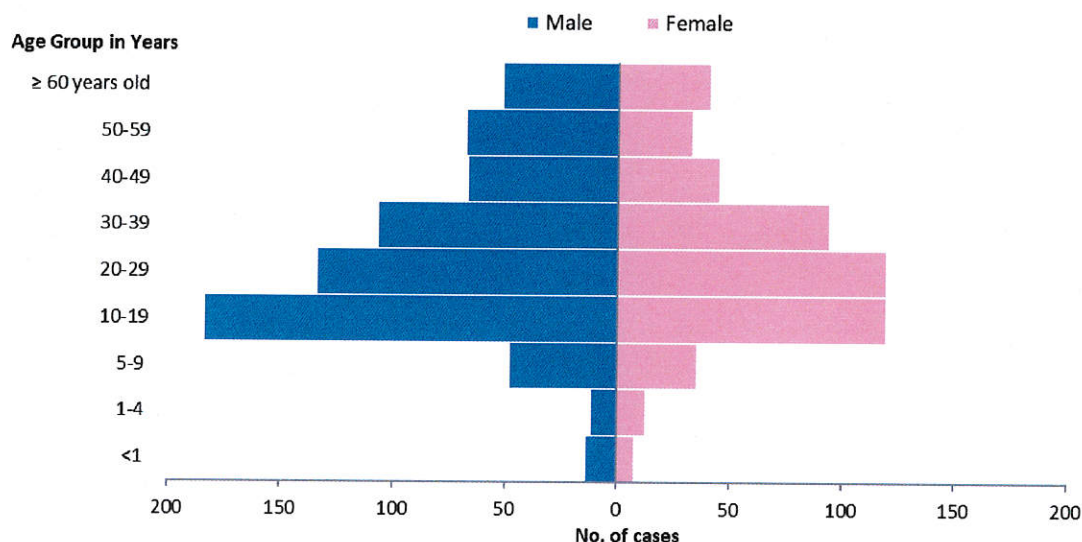


Profile of Cases

Age Group and Sex

Majority of the reported cases were male (686, 57%). Age of cases ranged from less than 1 month to 92 years old (median age of 26 years). Most of the cases were 10 to 19 years old (304, 25%) (Figure 8).

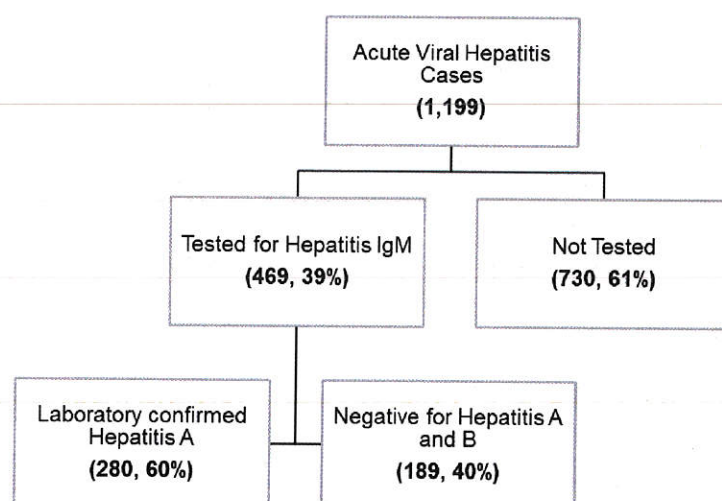
Figure 8. Acute Viral Hepatitis Cases by Age Group and Sex (N=1,199)
Philippines, January 1 to October 27, 2018



Laboratory Status

A total of 469 (39%) reported cases were tested for Hepatitis A IgM. Among those tested, 280 (60%) were positive for Hepatitis A (Figure 9).

Figure 9. Acute Viral Hepatitis Cases by Case Classification (N=1,199)
Philippines, January to October 2018



Profile of Deaths

Eleven deaths were reported (CFR=0.92%). Majority of the reported deaths were male (10, 91%). Age groups of these deaths were: 5-9 years (1, 9%), 10 to 19 years (1, 9%), 40 to 49 years (2, 18%), 50 to 59 (4, 36%) and 60 and above (3, 27%).

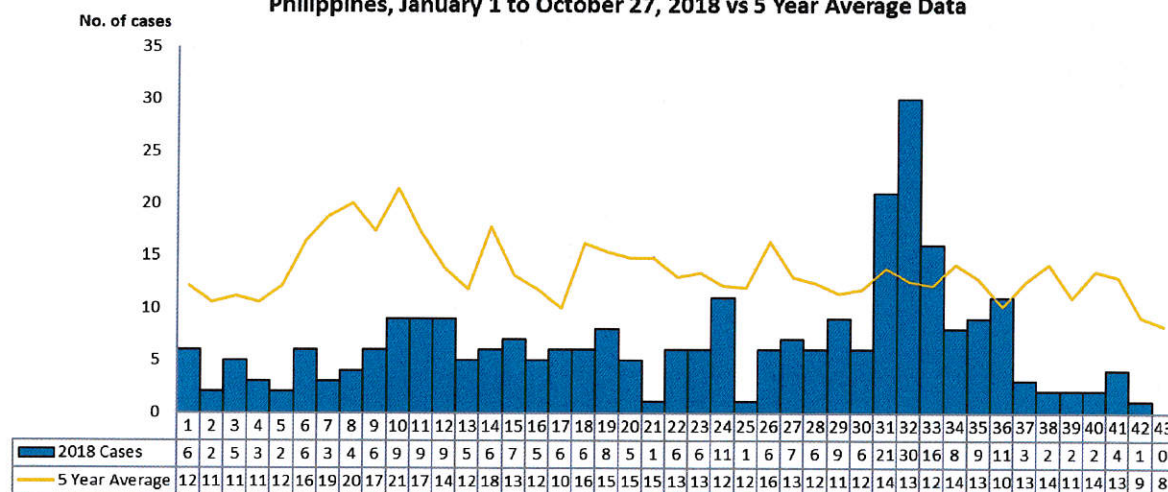


B. Confirmed Cases

Trend in the Philippines

A total of 1,199 acute viral cases were reported nationwide from January 1 to October 27, 2018. Out of this, there were 280 confirmed Hepatitis A cases reported. The distribution of confirmed 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=280)
Philippines, January 1 to October 27, 2018 vs 5 Year Average Data



*same time period

Geographical Distribution

There was a 32% decrease of confirmed Hepatitis A cases from 412 cases in 2017 to 280 cases in 2018 for the same period (January 1 to October 27, 2018). Most of the cases were from the following regions: Region VI (96, 34%), Region VII (71, 25%), IV-A (19, 7%), NCR (18, 6%) and Region IX (17, 6%) (Table 7). There were no reported deaths among cases.

Table 7. Confirmed Hepatitis A Cases & Deaths by Region (N=280)
Philippines, 2018* vs 2017**

Region	2018		2017		% Change
	Cases	Deaths	Cases	Deaths	
PHILIPPINES	280	0	412	1	↓32
I	1	0	14	0	↓93
II	8	0	3	0	↑167
III	3	0	16	1	↓81
IV-A	19	0	28	0	↓32
MIMAROPA	3	0	1	0	↑200
V	2	0	16	0	↓88
VI	96	0	58	0	↑66
VII	71	0	102	0	↓30
VIII	1	0	7	0	↓86
IX	17	0	23	0	↓26
X	9	0	47	0	↓81
XI	1	0	4	0	↓75
XII	5	0	15	0	↓67
ARMM	5	0	14	0	↓64
CAR	5	0	8	0	↓38
CARAGA	16	0	14	0	↑14
NCR	18	0	42	0	↓57

*From the period of January 1 to October 27, 2018

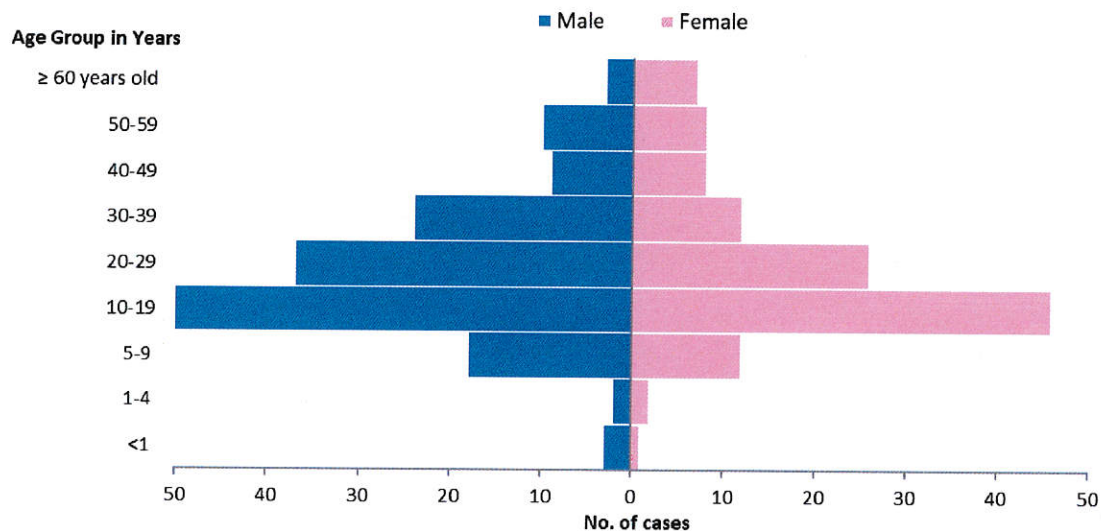
**From the period of January 1 to October 27, 2017



Profile of Cases

Majority of the cases were male (158, 56%). Age of cases ranged from less than 1 month to 82 years old (median age of 21 years). The most affected age group was 10 to 19 years (98, 35%) (Figure 11).

Figure 11. Hepatitis A Cases by Age Group and Sex (N=280)
Philippines, January 1 to October 27, 2018



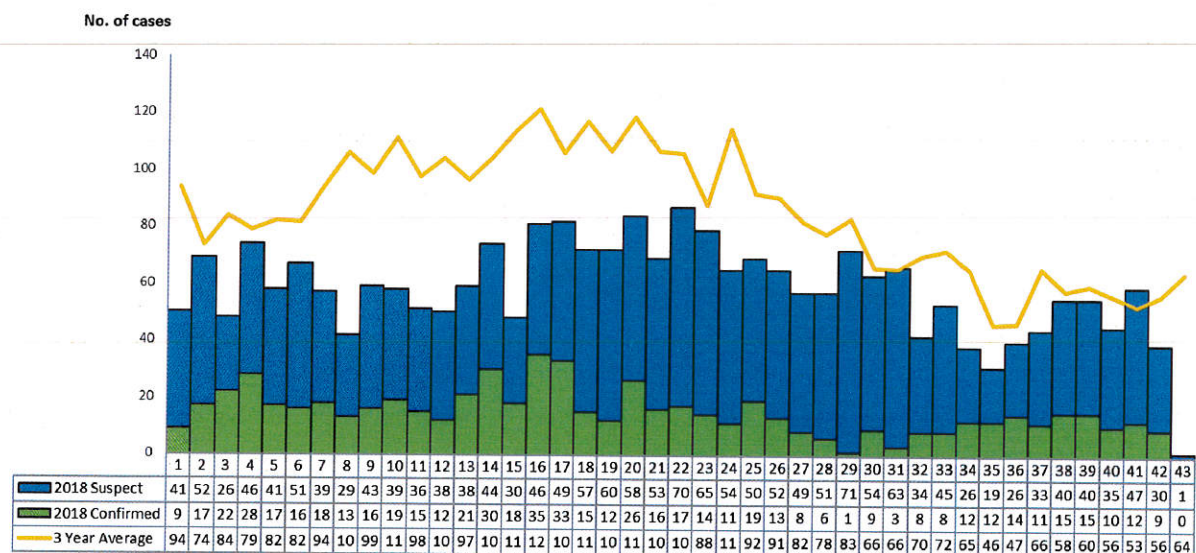
IV. Rotavirus

A. Reported Cases

Trend in the Philippines

A total of 2,506 reported rotavirus cases were reported nationwide from January 1 to October 27, 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=2,506)
Philippines, January 1 to October 27, 2018 vs 3 Year Average Data



*same time period



Geographical Distribution

There was a 31% decrease of reported Rotavirus cases from 3,617 cases in 2017 to 2,506 cases in 2018. Most of the reported cases were from the following regions: Region I (554, 22%), ARMM (486, 19%), Region XII (409, 16%), Region VI (305, 12%) and Region V (284, 11%) (Table 8).

Table 8. Reported Rotavirus Cases & Deaths by Region (N=2,506)
Philippines, 2018* vs 2017**

Region	2018		2017		% Change
	Cases	Deaths	Cases	Deaths	
PHILIPPINES	2,506	23	3,617	41	↓31
I	554	6	782	19	↓29
II	0	0	0	0	0
III	4	0	1	0	↑300
IV-A	7	0	11	0	↓36
MIMAROPA	204	0	167	1	↑22
V	284	0	228	0	↑25
VI	305	0	621	7	↓51
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	409	4	632	8	↓35
ARMM	486	13	626	6	↓22
CAR	0	0	0	0	0
CARAGA	63	0	290	0	↓78
NCR	188	0	255	0	↓26

*From the period of January 1 to October 27, 2018

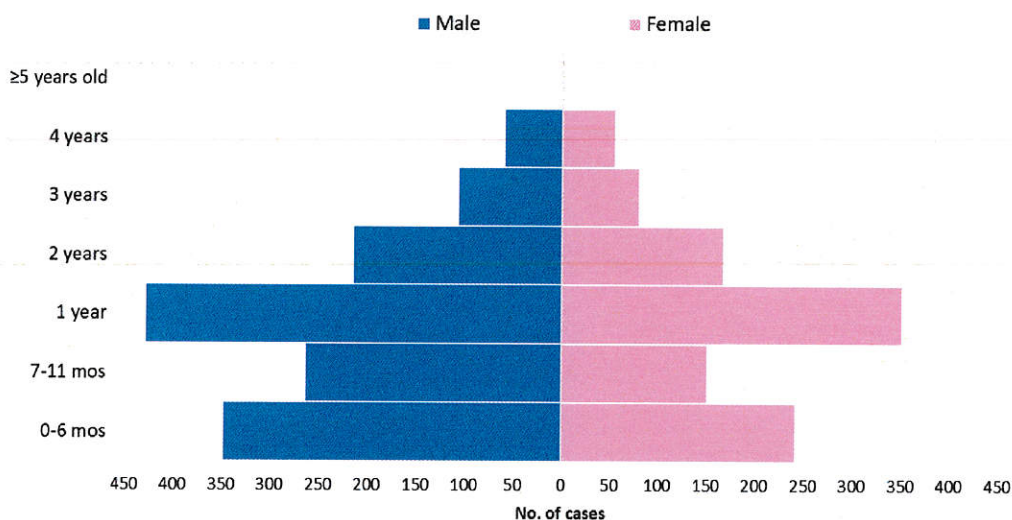
**From the period of January 1 to October 27, 2017

Profile of Cases

Age Group and Sex

Majority of the reported cases were male (1,448, 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 (780, 31%) (Figure 13).

Figure 13. Reported Rotavirus Cases by Age Group and Sex (N=2,506)
Philippines, January 1 to October 27, 2018

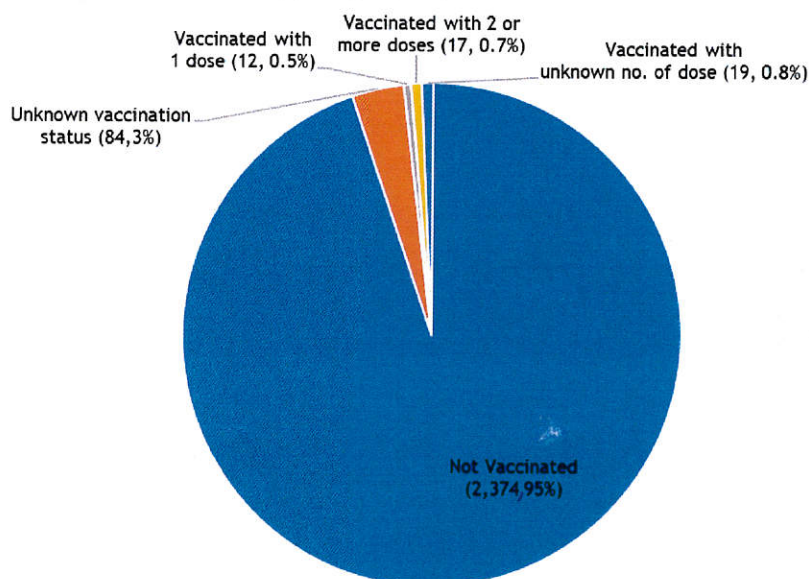




Vaccination Status

Majority of the reported cases were not vaccinated with rotavirus (2,374, 95%) (Figure 14).

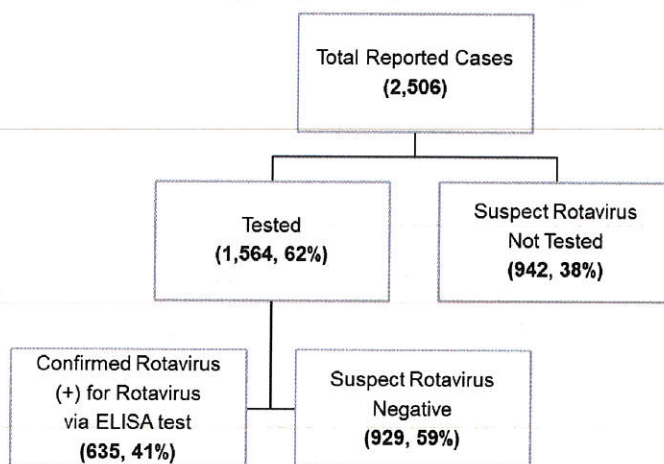
**Figure 14. Vaccination Status of Reported Rotavirus Cases (N=2,506)
Philippines, January to October 2018**



Laboratory Results

A total of 1,564 (62%) samples were collected for laboratory testing. Of these, 635 (41%) were laboratory confirmed for rotavirus and 929 (59%) were negative (Figure 15).

**Figure 15. Reported Rotavirus Cases by Laboratory Status (N=2,506)
Philippines, January to October 2018**



Profile of Deaths

Twenty-three deaths were reported (CFR=0.92%). Majority of the reported deaths were female (12, 52%). Age groups of these deaths were : less than 1 month to 6 months (6, 26%), 7 to 11 months (5, 22%), 1 year (6, 26%), 2 years (2, 9%), 3 years (3, 13%) and 4 years (1, 4%).



B. Confirmed Cases

Geographical Distribution

There was a 52% decrease of confirmed Rotavirus cases from 1,310 cases in 2017 to 635 cases in 2018. Most of the reported cases were from the following regions: Region I (208, 33%), Region VI (112, 18%), ARMM (102, 16%), Region XII (80, 13%) and NCR (56, 9%) (Table 9).

Table 9. Confirmed Rotavirus Cases & Deaths by Region (N=635)
Philippines, 2018* vs 2017**

Region	2018		2017		% Change
	Cases	Deaths	Cases	Deaths	
PHILIPPINES	635	1	1,310	3	↓52
I***	208	1	343	1	↓39
II	0	0	0	0	0
III	3	0	1	0	↑200
IV-A	3	0	6	0	↓50
MIMAROPA***	2	0	65	0	↓97
V***	54	0	56	0	↓4
VI***	112	0	293	1	↓62
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***	80	0	169	0	↓53
ARMM	102	0	143	1	↓29
CAR	0	0	0	0	0
CARAGA***	15	0	154	0	↓90
NCR***	56	0	76	0	↓26

*From the period of January 1 to October 27, 2018

**From the period of January 1 to October 27, 2017

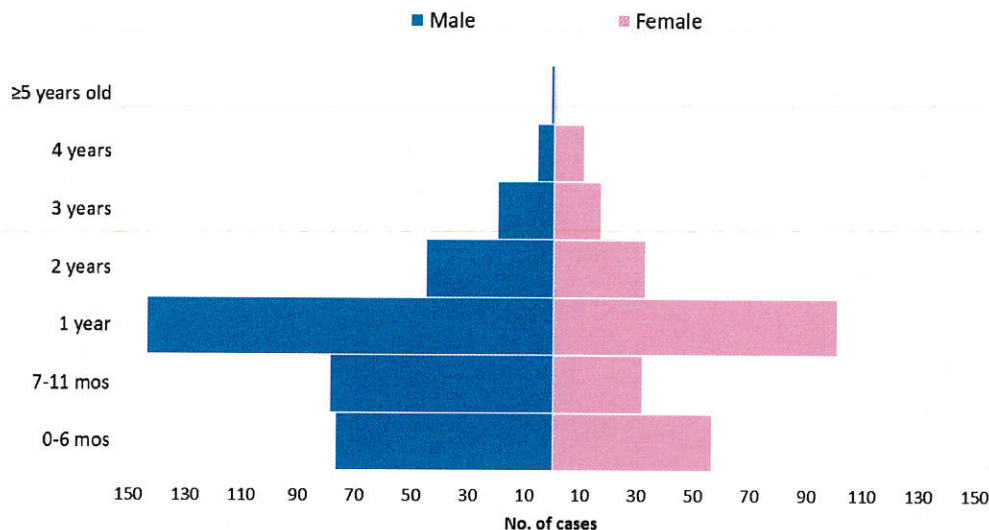
***Region with selected rotavirus sentinel sites

Profile of Cases

Age Group and Sex

Majority of the confirmed cases were male (380, 60%). 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 (245, 39%) (Figure 16).

Figure 16. Confirmed Rotavirus Cases by Age group, Sex and Case Classification (n=635)
Philippines, January 1 to October 27, 2018



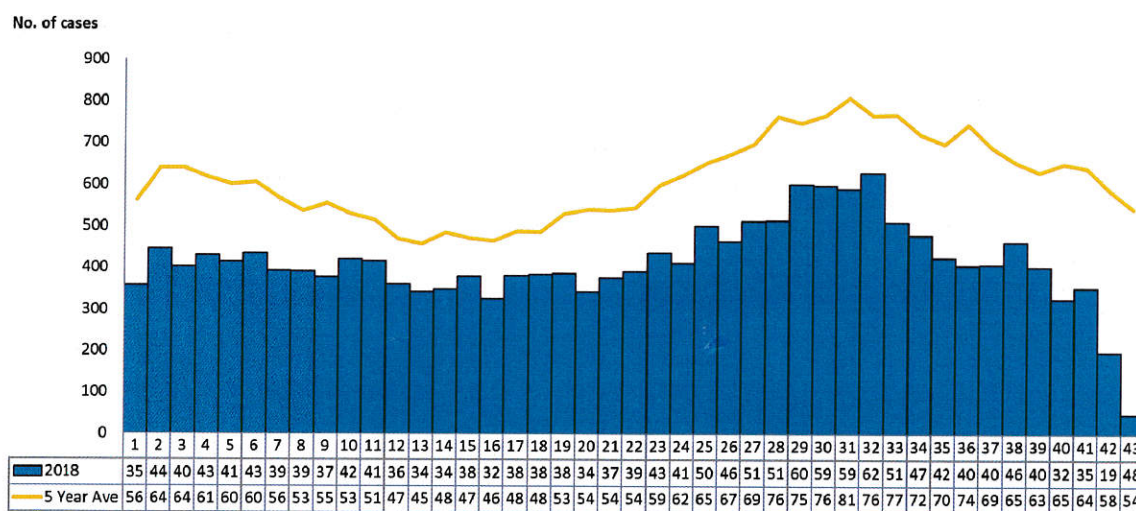


V. Typhoid Fever

Trend in the Philippines

A total of 17,787 reported typhoid fever cases were reported nationwide from January 1 to October 27, 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=17,787)
Philippines, January 1 to October 27, 2018 vs 5 Year Average Data



*same time period

Geographical Distribution

There was a 15% decrease of reported typhoid fever cases from 21,037 cases in 2017 to 17,787 cases in 2018. Most of the reported cases were from the following regions: Region X (3,461, 19%), Region VI (2,095, 12%), CAR (1,849, 10%), Region XII (1,498, 8%) and Region IV-A (1,457, 8%) (Table 10)

Table 10. Reported Typhoid Fever Cases & Deaths by Region (N=17,787)
Philippines, 2018* vs 2017**

Region	2018		2017		% Change
	Cases	Deaths	Cases	Deaths	
PHILIPPINES	17,787	28	21,037	36	↓15
I	712	0	1,211	1	↓41
II	363	0	698	3	↓48
III	451	0	649	0	↓31
IV-A	1,457	0	1,656	0	↓12
MIMAROPA	288	0	347	1	↓17
V	284	3	358	1	↓21
VI	2,095	5	1,904	4	↑10
VII	1,101	6	1,286	12	↓14
VIII	589	2	448	2	↑31
IX	1,031	3	1,571	4	↓34
X	3,461	1	4,304	0	↓20
XI	161	0	191	0	↓16
XII	1,498	2	2,120	0	↓29
ARMM	1,338	1	1,109	6	↑21
CAR	1,849	0	1,915	1	↓3
CARAGA	731	0	920	0	↓21
NCR	378	5	350	1	↑8

*From the period of January 1 to October 27, 2018

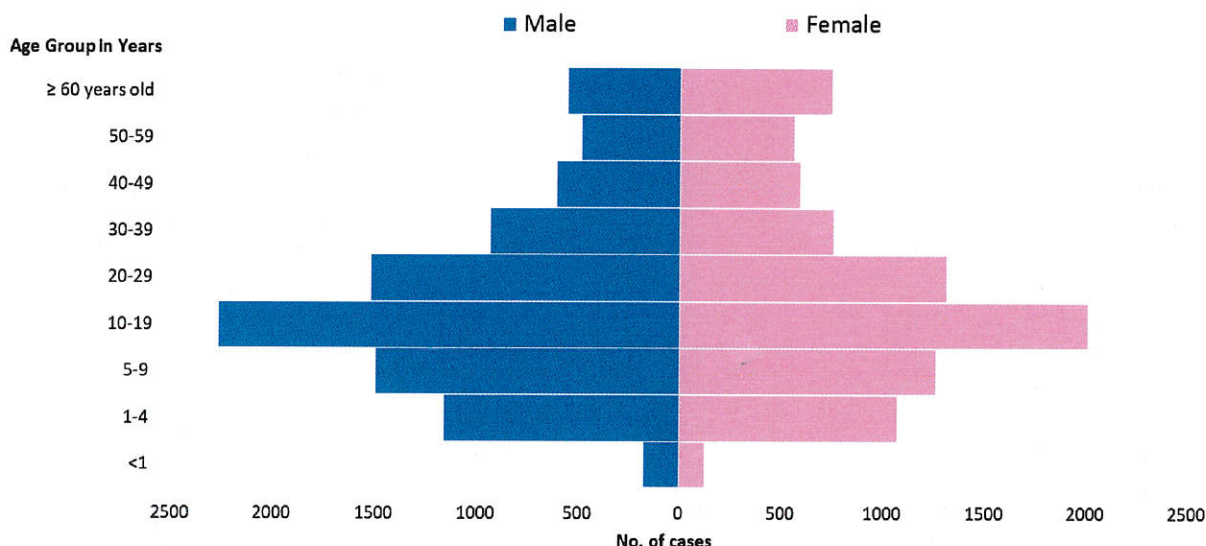
**From the period of January 1 to October 27, 2017



Profile of Cases

Majority of the reported cases were male (9,264, 52%). Age of cases ranged from less than 1 month to 98 years old (median age of 18 years). The most affected age group was 10 to 19 years old (4,281, 24%) (Figure 18).

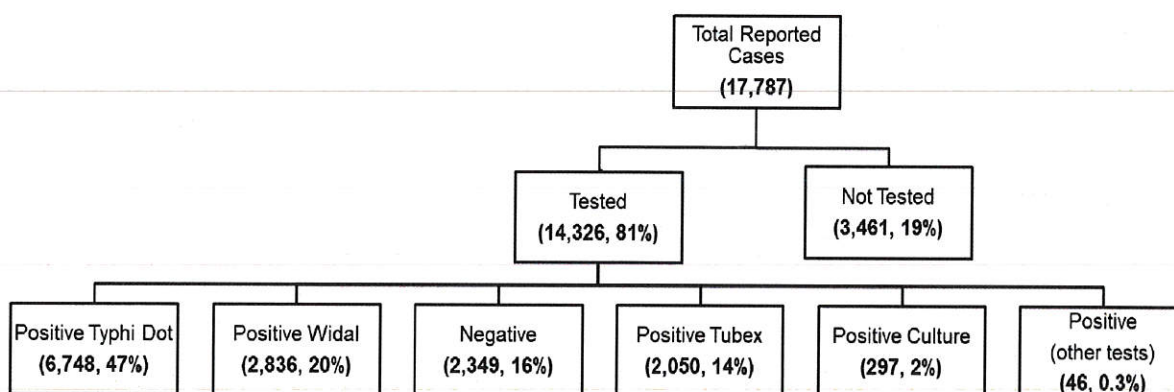
Figure 18. Reported Typhoid Fever Cases by Age Group and Sex (N=17,787)
Philippines, January 1 to October 27, 2018



Laboratory Results

A total of 14,326 (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=17,787)
Philippines, January to October 2018



Profile of Deaths

There were 28 deaths (CFR=0.16%) out of the 17,787 reported typhoid fever cases. Fifteen (15) reported deaths were male (54%). Age of deaths ranged from 2 to 83 years old (median age of 30 years). Age group of these deaths were: 1 to 4 years (1, 4%), 5 to 9 years (1, 4%), 10 to 19 years (7, 25%), 20 to 29 years (5, 18%), 30 to 39 (4, 14%), 40 to 49 years (2, 7%), 50 to 59 years (3, 11%) and 60 years and above (5, 18%).