



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 March 30, 2019 (Table 1).

**Table 1. Food & Waterborne Diseases
Philippines, 2019* vs 2018**

FOOD/WATER-BORNE DISEASES	2019			2018	% Difference *2019 vs 2018
	Cases	Deaths	CFR (%)	Cases	
Acute Bloody Diarrhea	2,977	1	0.03	5,459	↓45
Confirmed Cholera	4	0	0.00	3	↑33
Confirmed Rotavirus	147	1	0.68	220	↓33
Hepatitis A	37	0	0.00	68	↓46
Typhoid Fever	5,018	4	0.08	5,202	↓4


PIDSR Case Definition for Food and Waterborne Diseases

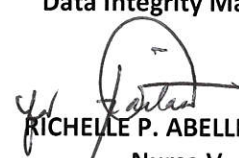
Acute Bloody Diarrhea (ABD)	
Reported Case	<ul style="list-style-type: none"> A person with acute diarrhea with visible blood in the stool.
Cholera	
Suspected Case	<ul style="list-style-type: none"> Disease unknown in the area: A person aged 5 years or more with severe dehydration or who died from acute 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



FERCHITO L. AVELINO, MD, MPH, PHSAE
Officer-in-Charge, Epidemiology Bureau


MA. NEMIA L. SUCALDITO, MD, PHSAE
Medical Officer V


HERDIE L. HIZON
Supervising Health Program Officer
Data Integrity Manager


RICHELLE P. ABELLERA, RN
Nurse V


JEZZA JONAH C. ACLAN, RN, MPH
Nurse III


KRIS PAULINE D. MARTINEZ, RN
Nurse II

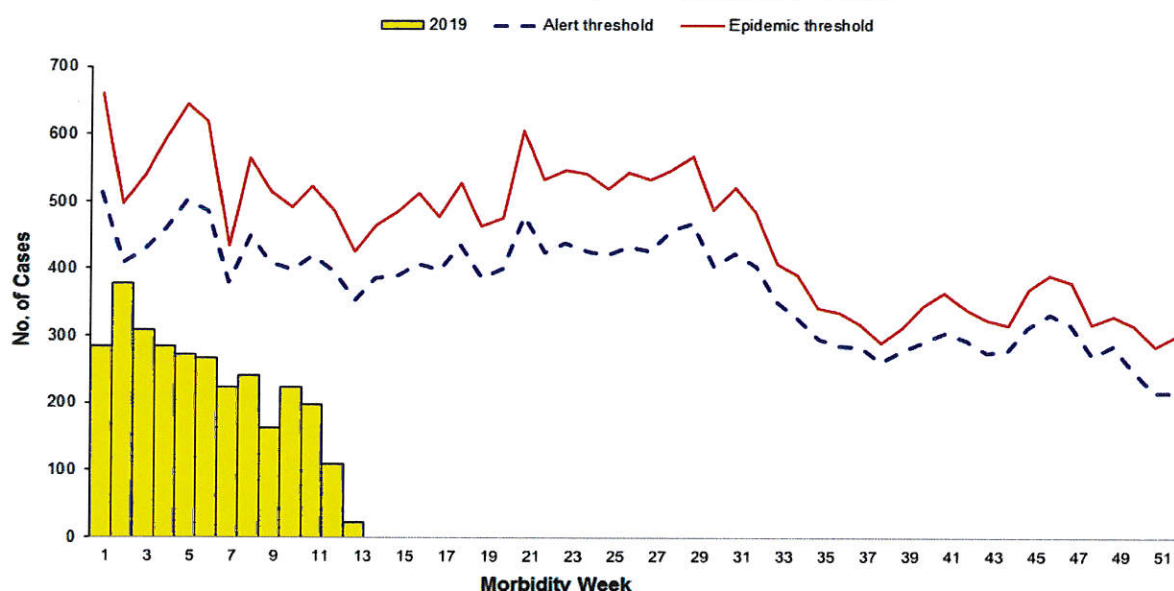


I. Acute Bloody Diarrhea (ABD)

Trend in the Philippines

A total of 2,977 acute bloody diarrhea cases were reported nationwide from January 1 to March 30, 2019. The distribution of cases for 2019 compared to epidemic and alert thresholds is shown below (Figure 1).

Figure 1. Reported Acute Bloody Diarrhea Cases by Morbidity Week as of January 1- March 30, 2019 (N=2,977)



Geographical Distribution

There was a 45% decrease of reported ABD cases from 5,459 cases in 2018 to 2,977 cases in 2019 for the same period (January 1 – March 30, 2019). Most of the reported cases were from the following regions: Region VII (1,057 or 36%), Region IX (446 or 15%), CARAGA (356 or 12%), and CAR (279 or 9%) (Table 2).

Table 2. Acute Bloody Diarrhea Cases & Deaths (N=2,977)
Philippines, 2019* vs 2018**

Region	2019		2018		% Change
	Cases	Deaths	Cases	Deaths	
PHILIPPINES	2,977	1	5,459	8	↓45
I	11	0	11	0	0
II	213	0	202	0	↑5
III	80	0	162	0	↓51
IV-A	72	0	202	0	↓64
MIMAROPA	6	0	35	0	↓83
V	19	0	11	0	↑73
VI	7	0	12	0	↓42
VII	1,057	1	1,994	7	↓47
VIII	75	0	145	0	↓48
IX	446	0	902	0	↓51
X	207	0	503	0	↓59
XI	32	0	43	0	↓26
XII	65	0	72	0	↓10
ARMM	36	0	58	0	↓38
CAR	279	0	375	0	↓26
CARAGA	356	0	717	1	↓50
NCR	16	0	15	0	↑7

*From the period of January 1 to March 30, 2019

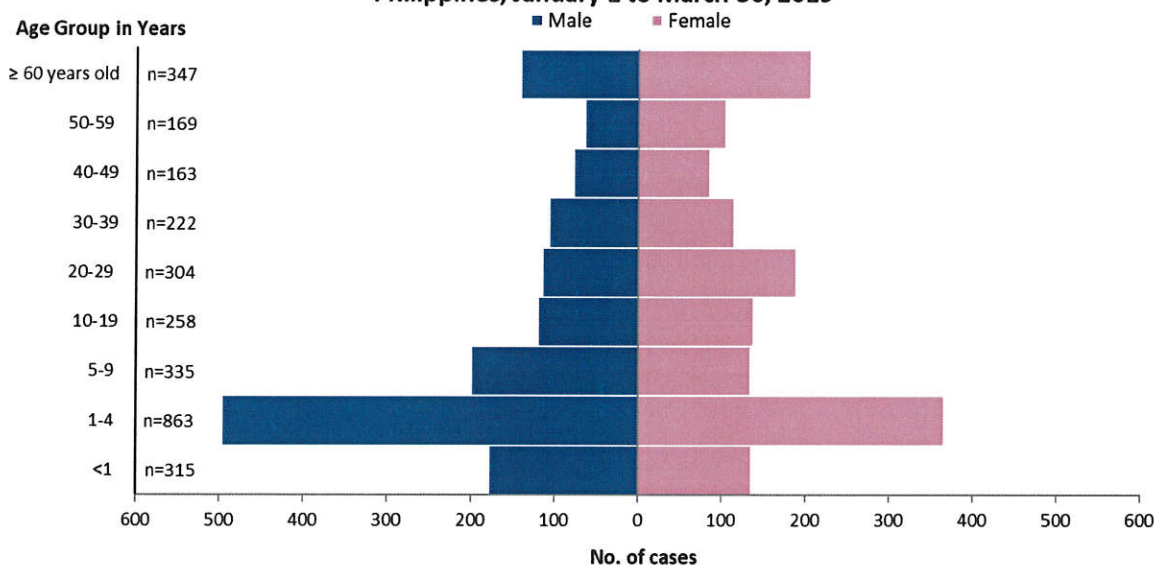
**From the period of January 1 to March 30, 2018



Profile of Cases

Almost equal distribution of reported ABD cases in males (1,475 or 50%) and females (1,502 or 50%) was noted. Age of cases ranged from less than 1 month to 94 years old (median age of 9 years). The most affected age group was 1 year to 4 years (863 or 29%) (Figure 2).

Figure 2. Acute Bloody Diarrhea Cases by Age Group and Sex (N=2,977)
Philippines, January 1 to March 30, 2019



Laboratory Results

A total of 2,086 (70%) samples were collected for laboratory testing (Figure 3). Of these, 1,769 (85%) yielded positive for different organisms. The frequently identified organism was *Entamoeba histolytica* (1,532 or 87%) (Table 3).

Figure 3. ABD Cases by Laboratory Result (N=2,977)
Philippines, January 1 – March 30, 2019

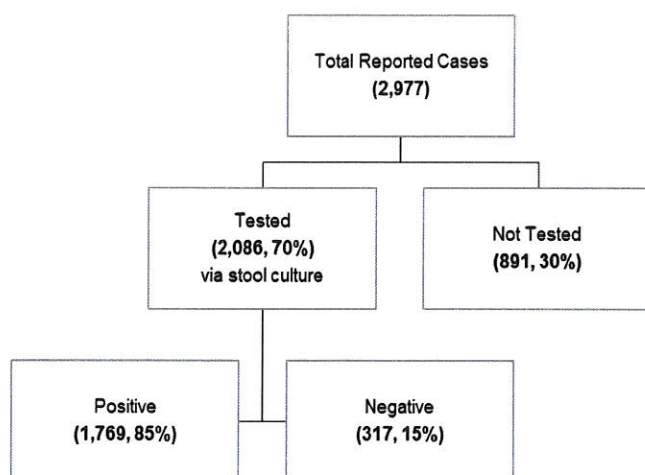


Table 3. Top 3 Organisms in ABD Cases
Philippines, January 1 – March 30, 2019

Organism	Cases
<i>Entamoeba histolytica</i>	1,532
<i>Shigella</i>	135
<i>Escherichia Coli</i>	43

Profile of Deaths

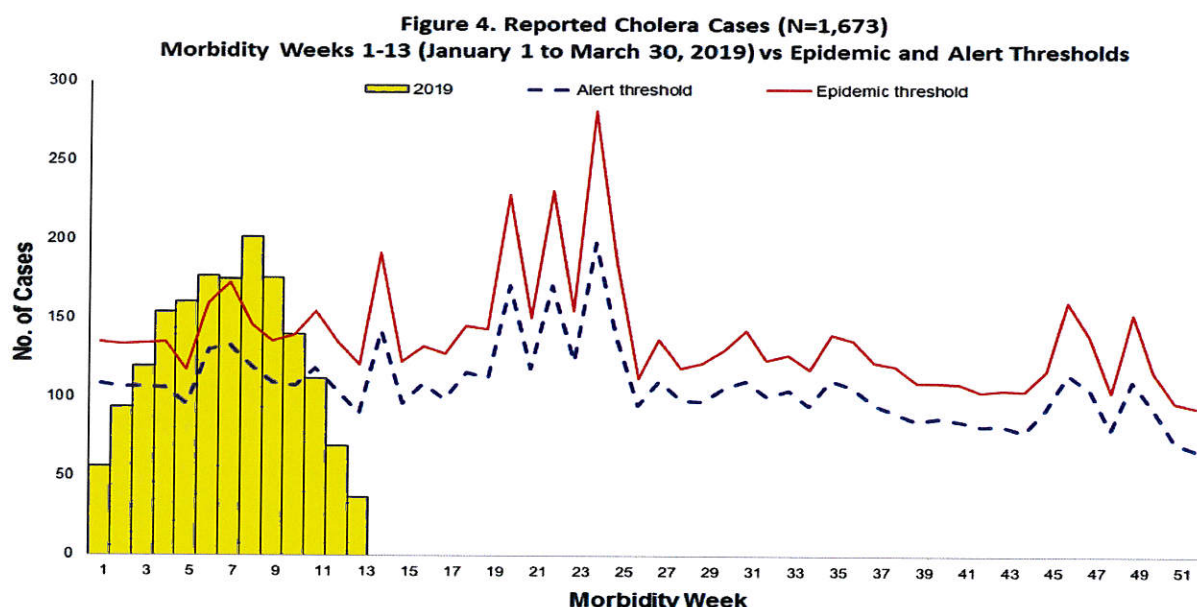
One death (CFR: 0.03%) was reported among acute bloody diarrhea cases. The reported death was male and 3 years old from Region VII.



II. Cholera

Trend in the Philippines

A total of 1,673 reported cholera cases were reported nationwide from January 1 to March 30, 2019. The distribution of cases for 2019 compared to epidemic and alert thresholds is shown below (Figure 4).



Geographical Distribution

There was a 166% increase of reported cholera cases from 630 cases in 2018 to 1,673 cases in 2019. Regions VIII (1,274 or 76%) reported the highest number of cholera cases from January 1 – March 30, 2019 (Table 4).

Table 4. Reported Cholera Cases & Deaths by Region (N=1,673)
Philippines, 2019* vs 2018**

Region	2019		2018		% Change
	Cases	Deaths	Cases	Deaths	
PHILIPPINES	1,673	0	630	4	↑166
I	1	0	0	0	↑
II	0	0	0	0	-
III	0	0	0	0	-
IV-A	1	0	3	0	↓67
MIMAROPA	0	0	0	0	-
V	108	0	234	4	↓54
VI	0	0	1	0	↓100
VII	0	0	1	0	↓100
VIII	1,274	0	0	0	↑
IX	0	0	0	0	-
X	5	0	72	0	↓93
XI	0	0	15	0	↓100
XII	0	0	0	0	-
ARMM	0	0	2	0	↓100
CAR	0	0	0	0	-
CARAGA	283	0	302	0	↓6
NCR	1	0	0	0	↑

*From the period of January 1 to March 30, 2019

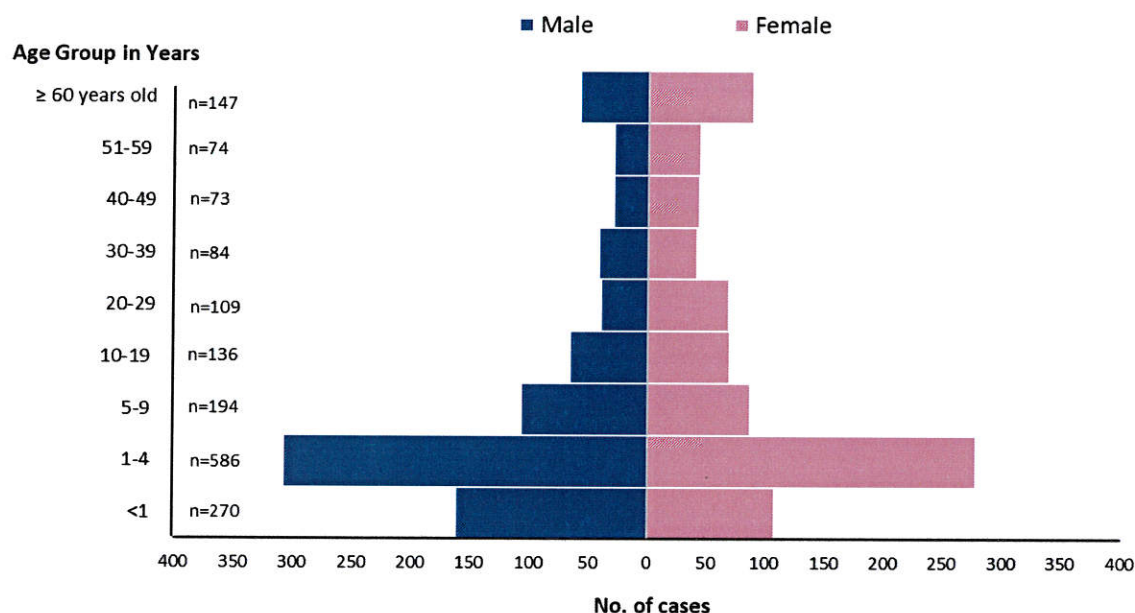
**From the period of January 1 to March 30, 2018



Profile of Cases

Almost equal distribution of reported cholera cases in males (841 or 50%) and females (832 or 50%) was noted. Age of suspect cases ranged from less than 1 month to 92 years old (median age of 4 years). The most affected age groups were 1 to 4 years (586 or 35%) followed by less than 1 year (270 or 16%) (Figure 5).

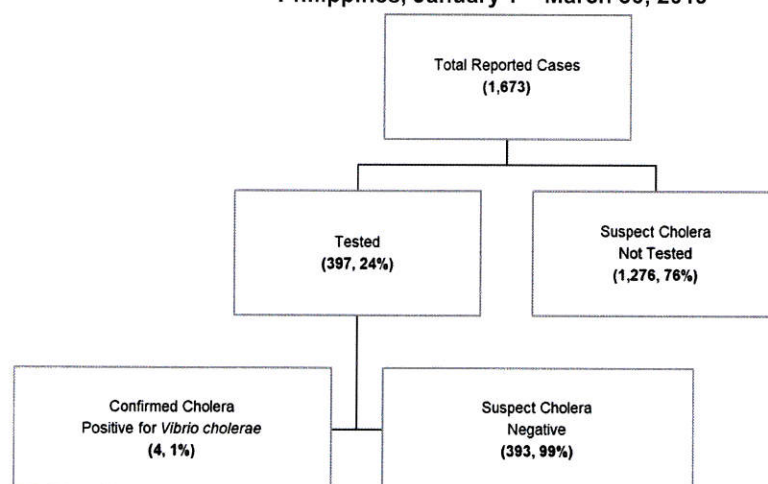
Figure 5. Reported Cholera Cases by Age Group and Sex (N=1,673)
Philippines, January 1 to March 30, 2019



Laboratory Results

A total of 397 (24%) samples were collected for laboratory testing (Figure 6). Of these, 4 (1%) yielded positive for *Vibrio cholerae*.

Figure 6. Cholera Cases by Laboratory Result (N=1,673)
Philippines, January 1 – March 30, 2019



Profile of Deaths

No reported death among cholera cases.

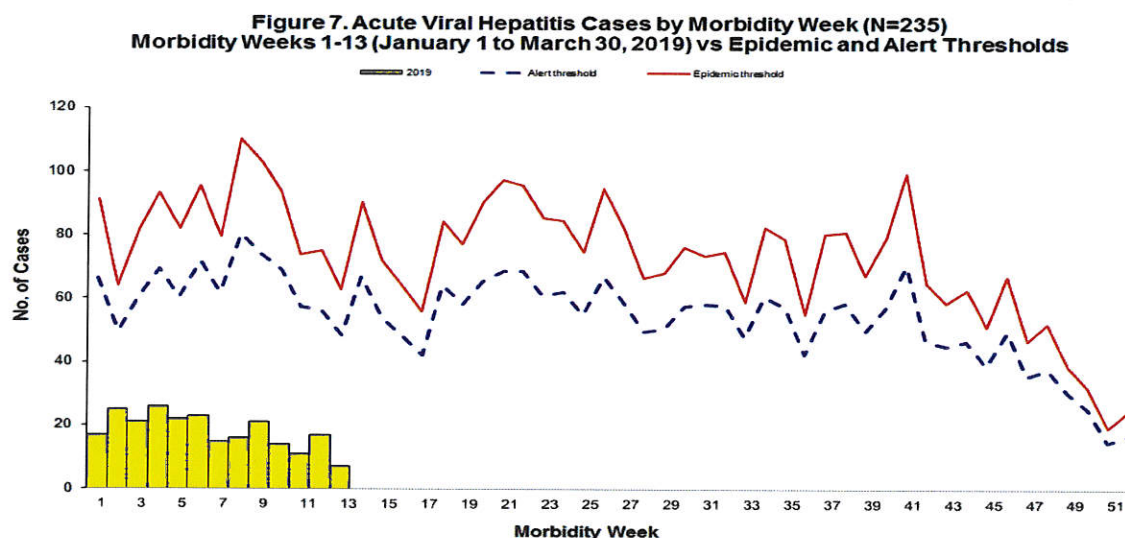


III. Hepatitis A

A. Reported Cases

Trend in the Philippines

A total of 235 acute viral hepatitis cases were reported nationwide from January 1 to March 30, 2019. The distribution of cases for 2019 compared to epidemic and alert thresholds is shown below (Figure 7).



Geographical Distribution

There was a 43% decrease of reported acute viral hepatitis cases from 414 cases in 2018 to 235 cases in 2019. Most of the reported cases were from the following regions: Region IX (49 or 21%), Region X (43 or 18%), Region VI (32 or 14%), and NCR (27 or 11%) (Table 6).

Table 6. Reported Acute Viral Hepatitis Cases & Deaths by Region (N=235)
Philippines, 2019* vs 2018**

Region	2019		2018		% Change
	Cases	Deaths	Cases	Deaths	
PHILIPPINES	235	2	414	4	↓43
I	2	0	12	1	↓83
II	13	0	2	0	↑550
III	6	0	20	0	↓70
IV-A	16	1	27	0	↓41
MIMAROPA	4	0	12	0	↓67
V	3	0	14	1	↓70
VI	32	0	46	0	↓30
VII	16	1	93	2	↓83
VIII	1	0	3	0	↓67
IX	49	0	10	0	↑390
X	43	0	73	0	↓41
XI	8	0	4	0	↑100
XII	5	0	9	0	↓44
ARMM	6	0	9	0	↓33
CAR	0	0	6	0	↓100
CARAGA	4	0	27	0	↓85
NCR	27	0	47	0	↓43

*From the period of January 1 to March 30, 2019

**From the period of January 1 to March 30, 2018

*Case counts reported here do NOT represent the final number and are subject to change after inclusion of delayed reports and review of cases. All 2018 data reflects partial data only of all regions. Total percentages may not add up to 100 due to rounding off of figures. A PDF file of this report is available at www.doh.gov.ph/statistics.

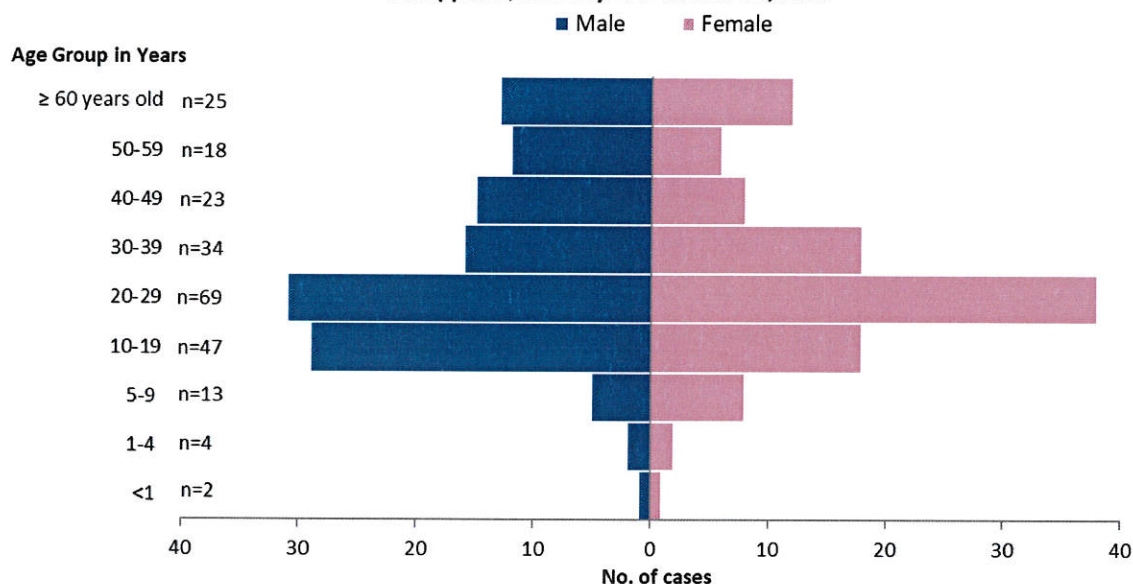


Profile of Cases

Age Group and Sex

Majority of the reported cases were male (124 or 53%). Age of cases ranged from less than 1 month to 92 years old (median age of 28 years). Most of the cases were 20 to 29 years old (69 or 29%) (Figure 8).

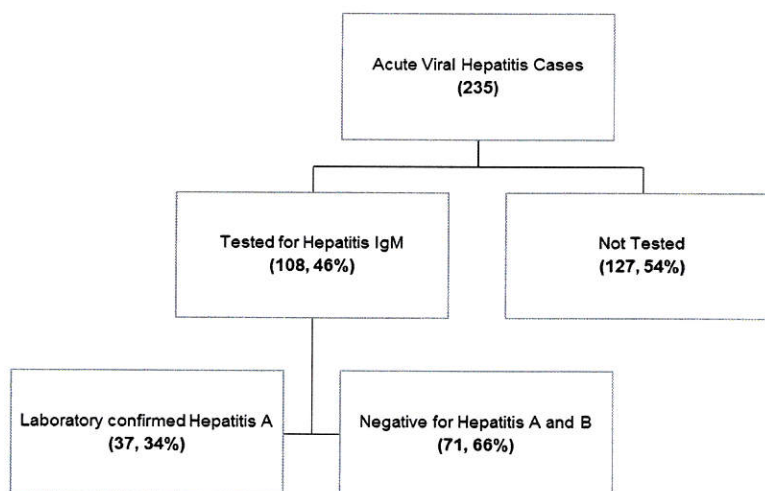
Figure 8. Acute Viral Hepatitis Cases by Age Group and Sex (N=235)
Philippines, January 1 to March 30, 2019



Laboratory Status

A total of 108 (46%) reported cases were tested for Hepatitis A IgM. Among those tested, 37 (34%) were positive for Hepatitis A (Figure 9).

Figure 9. Acute Viral Hepatitis Cases by Case Classification (N=235)
Philippines, January 1 – March 30, 2019



Profile of Deaths

Two acute viral hepatitis deaths (CFR=1%) were reported. One case was 34 years old and male, the other was 61 years old and female.



B. Confirmed Cases

Geographical Distribution

There was a 43% decrease of confirmed Hepatitis A cases from 68 cases in 2018 to 37 cases in 2019 for the same period (January 1 – March 30, 2019). Region X reported the highest number of Hepatitis A cases (12 or 32%) followed by Region IX (8 or 22%) as shown below (Table 7). There were no reported deaths among confirmed cases.

Table 7. Confirmed Hepatitis A Cases & Deaths by Region (n=37)
Philippines, 2019* vs 2018**

Region	2019		2018		% Change
	Cases	Deaths	Cases	Deaths	
PHILIPPINES	37	0	68	0	↓43
I	0	0	0	0	-
II	0	0	1	0	↓100
III	1	0	1	0	0
IV-A	1	0	5	0	↓80
MIMAROPA	0	0	0	0	-
V	1	0	3	0	↓67
VI	3	0	5	0	↓40
VII	8	0	31	0	↓74
VIII	0	0	0	0	-
IX	8	0	3	0	↑167
X	12	0	7	0	↑71
XI	0	0	1	0	↓100
XII	1	0	0	0	↑
ARMM	1	0	3	0	↓67
CAR	0	0	1	0	↓100
CARAGA	0	0	1	0	↓100
NCR	1	0	6	0	↓83

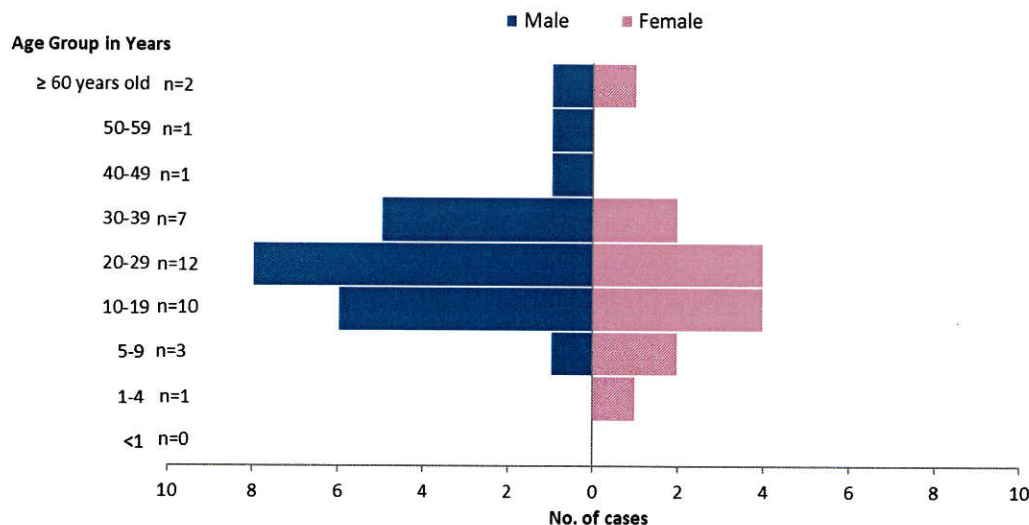
*From the period of January 1 to March 30, 2019

**From the period of January 1 to March 30, 2018

Profile of Cases

Majority of the cases were male (23 or 62%). Age of cases ranged from 4 to 80 years old (median age of 23 years). The most affected age group was 20 to 29 years (12 or 32%) (Figure 10).

Figure 10. Hepatitis A Cases by Age Group and Sex (n=37)
Philippines, January 1 to March 30, 2019





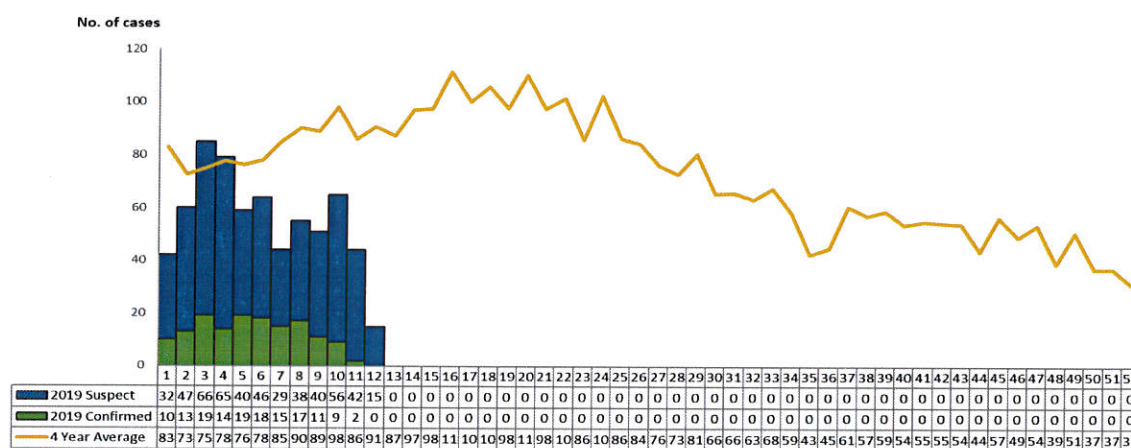
IV. Rotavirus

A. Reported Cases

Trend in the Philippines

A total of 663 reported rotavirus cases were reported nationwide from January 1 to March 30, 2019. The distribution of cases for 2019 compared to the 4-year average of cases from 2015-2018 is shown below (Figure 11).

Figure 11. Rotavirus Cases by Morbidity Week and Case Classification (N=663)
Philippines, January 1- March 30, 2019 vs 4 Year Average Data



*same time period

Geographical Distribution

There was a 9% decrease of reported Rotavirus cases from 732 cases in 2018 to 663 cases in 2019. Most of the reported cases were from the following regions: Region I (199 or 30%), Region V (194 or 29%), ARMM (60 or 9%) and Region VI (55 or 8%) (Table 8).

Table 8. Reported Rotavirus Cases & Deaths by Region (N=663)
Philippines, 2019* vs 2018**

Region	2019		2018		% Change
	Cases	Deaths	Cases	Deaths	
PHILIPPINES	663	6	732	3	↓9
I***	199	2	159	1	↑25
II	0	0	0	0	-
III	1	0	0	0	↑
IV-A	0	0	5	0	↓100
MIMAROPA***	41	0	28	0	↑46
V***	194	1	108	0	↑80
VI***	55	0	56	0	↓2
VII	1	0	0	0	↑
VIII	0	0	0	0	-
IX	0	0	0	0	-
X	0	0	1	0	↓100
XI	0	0	0	0	-
XII***	48	1	155	2	↓69
ARMM	60	2	125	0	↓52
CAR	0	0	0	0	-
CARAGA***	47	0	20	0	↑135
NCR***	17	0	75	0	↓77

*From the period of January 1 – March 30, 2019

**From the period of January 1 – March 30, 2018

***Region with selected rotavirus sentinel sites

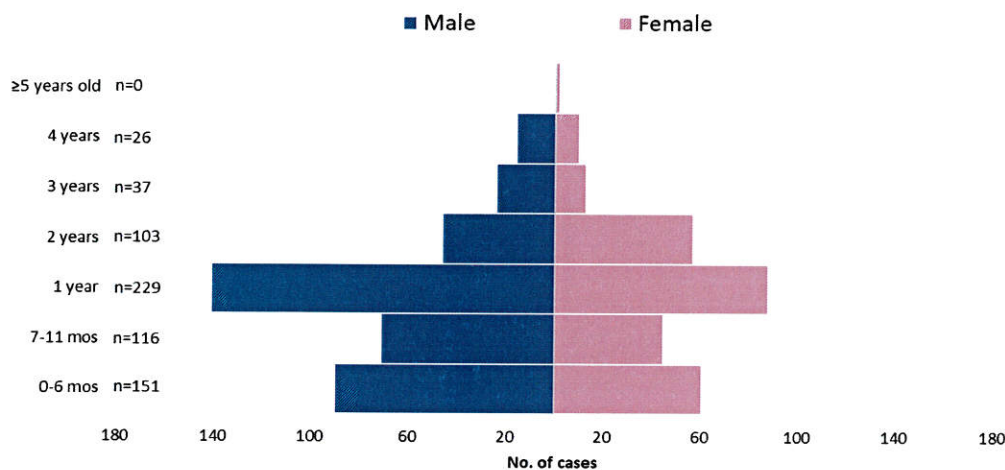


Profile of Cases

Age Group and Sex

Majority of the reported cases were male (389 or 59%). Age of cases ranged from less than 1 month to 4 years old (median age of 1 year). Most of the cases were 1 year old (229 or 35%) (Figure 12).

Figure 12. Reported Rotavirus Cases by Age Group and Sex (N=663)
Philippines, January 1-March 30, 2019



Note: 14 cases with unspecified age are not reflected in the graph

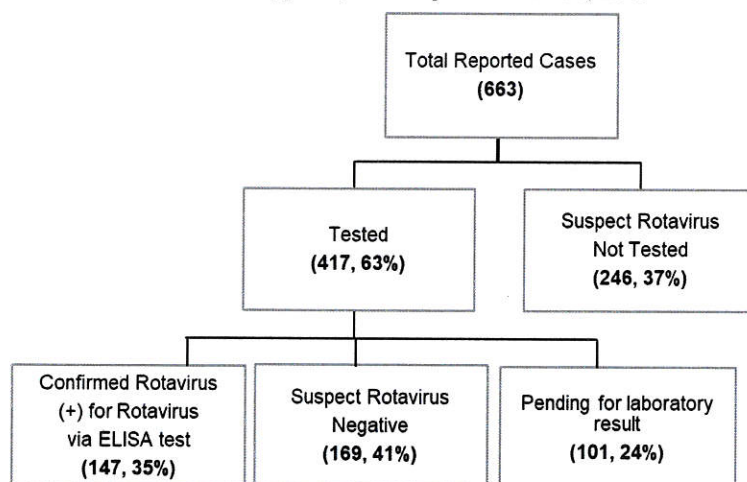
Vaccination Status

Majority of reported rotavirus cases were not vaccinated with rotavirus vaccine (647 or 98%). Meanwhile, there were vaccinated cases as follows: 1 dose (2 or 0.3%), 2 doses or more doses (6 or 0.9%) and vaccinated with unknown number of dose (8 or 1.2%).

Laboratory Results

A total of 417 (63%) samples were collected for laboratory testing. Of these, 147 (35%) were laboratory confirmed for rotavirus and 169 (41%) were negative (Figure 13).

Figure 13. Reported Rotavirus Cases by Laboratory Status (N=663)
Philippines, January 1 – March 30, 2019



Profile of Deaths

Six deaths (CFR=1%) out of the 663 reported rotavirus cases were reported from Regions I (2 cases), V (1 case), XII (1 case) and ARMM (2 cases).



B. Confirmed Cases

Geographical Distribution

There was a 33% decrease of confirmed Rotavirus cases from 220 cases in 2018 to 147 cases in 2019. Most of the reported cases were from the following regions: Region I (90 or 61%), Region V (19 or 13%) and CARAGA (15 or 10%) (Table 9).

Table 9. Confirmed Rotavirus Cases & Deaths by Region (n=147)
Philippines, 2019* vs 2018**

Region	2019		2018		% Change
	Cases	Deaths	Cases	Deaths	
PHILIPPINES	147	1	220	0	↓33
I***	90	1	51	0	↑76
II	0	0	0	0	-
III	0	0	0	0	-
IV-A	0	0	3	0	↓100
MIMAROPA***	0	0	2	0	↓100
V***	19	0	34	0	↓44
VI***	8	0	24	0	↓67
VII	1	0	0	0	↑
VIII	0	0	0	0	-
IX	0	0	0	0	-
X	0	0	0	0	-
XI	0	0	0	0	-
XII***	2	0	32	0	↓94
ARMM	5	0	30	0	↓83
CAR	0	0	0	0	-
CARAGA***	15	0	8	0	↑88
NCR***	7	0	36	0	↓81

*From the period of January 1 – March 30, 2019

**From the period of January 1 – March 30, 2018

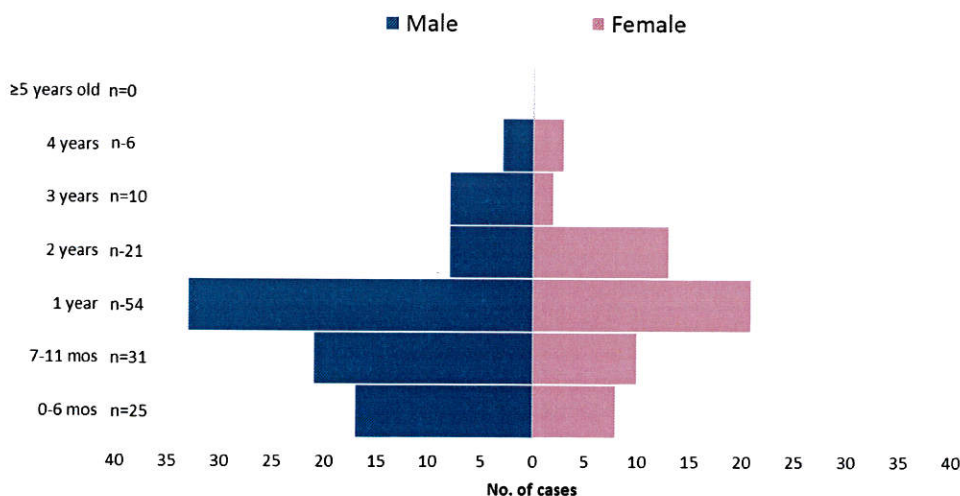
***Region with selected rotavirus sentinel sites

Profile of Cases

Age Group and Sex

Majority of the confirmed cases were male (90 or 61%). Age of cases ranged from 2 months to 4 years old (median age of 1 year). Most of the cases were 1 year old (54 or 37%) (Figure 14).

Figure 14. Confirmed Rotavirus Cases by Age group, Sex and Case Classification (n=147)
Philippines, January 1-March 30, 2019





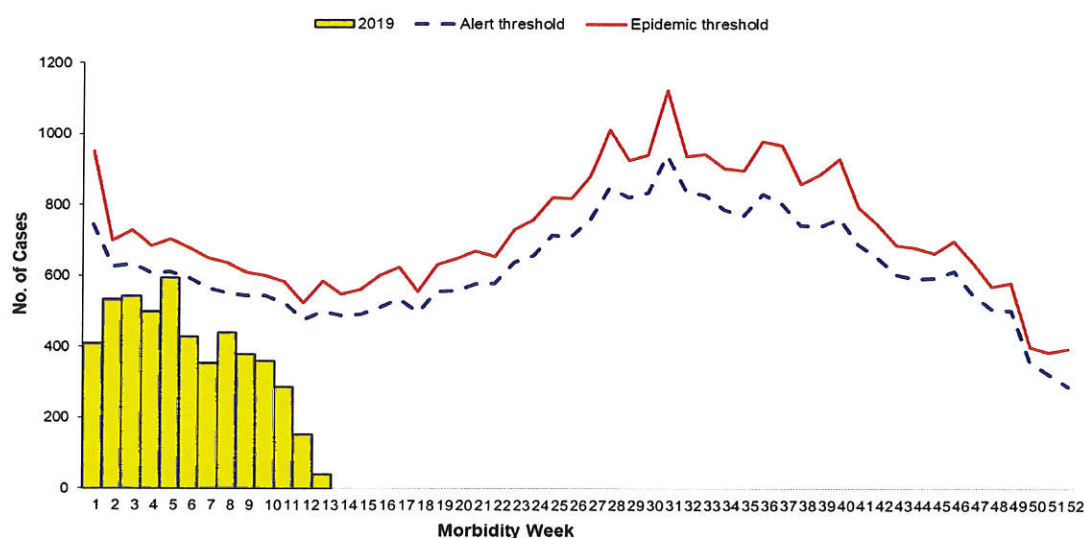
V. Typhoid Fever

A. Reported Cases

Trend in the Philippines

A total of 5,018 reported typhoid fever cases were reported nationwide from January 1 to March 30, 2019. The distribution of cases for 2019 compared to epidemic and alert thresholds is shown below (Figure 15).

Figure 15. Reported Typhoid Cases by Morbidity Week as of January 1-March 30, 2019 (N=5,018)



Geographical Distribution

There was a 4% decrease of reported typhoid fever cases from 5,202 cases in 2018 to 5,018 cases in 2019. Most of the reported cases were from the following regions: Region X (814 or 16%), CAR (636 or 13%), Region VI (629 or 13%), Region XII (617 or 12%) and Region VII (369 or 7%) (Table 10).

Table 10. Reported Typhoid Fever Cases & Deaths by Region (N=5,018)
Philippines, 2019* vs 2018**

Region	2019		2018		% Change
	Cases	Deaths	Cases	Deaths	
PHILIPPINES	5,018	4	5,202	8	↓4
I	147	0	186	0	↓21
II	253	0	110	0	↑130
III	166	0	120	0	↑38
IV-A	278	1	526	0	↓47
MIMAROPA	92	0	70	0	↑31
V	64	0	92	1	↓30
VI	629	1	517	2	↑22
VII	369	1	292	2	↑26
VIII	117	0	269	1	↓57
IX	266	1	394	0	↓32
X	814	0	968	0	↓16
XI	63	0	44	0	↑43
XII	617	0	456	0	↑35
ARMM	299	0	441	1	↓32
CAR	636	0	301	0	↑111
CARAGA	79	0	299	0	↓74
NCR	129	0	117	1	↑10

*From the period of January 1 – March 30, 2019

**From the period of January 1 – March 30, 2018

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

All 2018 data reflects partial data only of all regions. Total percentages may not add up to 100 due to rounding off of figures.

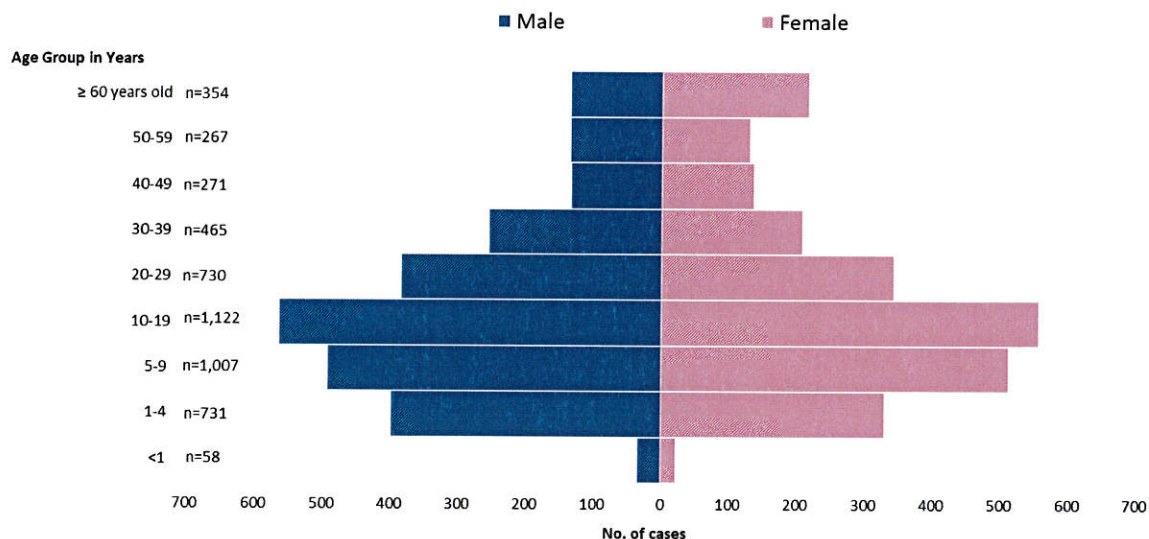
A PDF file of this report is available at www.doh.gov.ph/statistics.



Profile of Cases

Majority of the reported cases were male (2,547 or 51%). Age of cases ranged from 1 month to 98 years old (median age of 16 years). The most affected age group was 10 to 19 years old (1,122 or 22%) (Figure 16).

Figure 16. Reported Typhoid Fever Cases by Age Group and Sex (N=5,018)
Philippines, January 1 - March 30, 2019

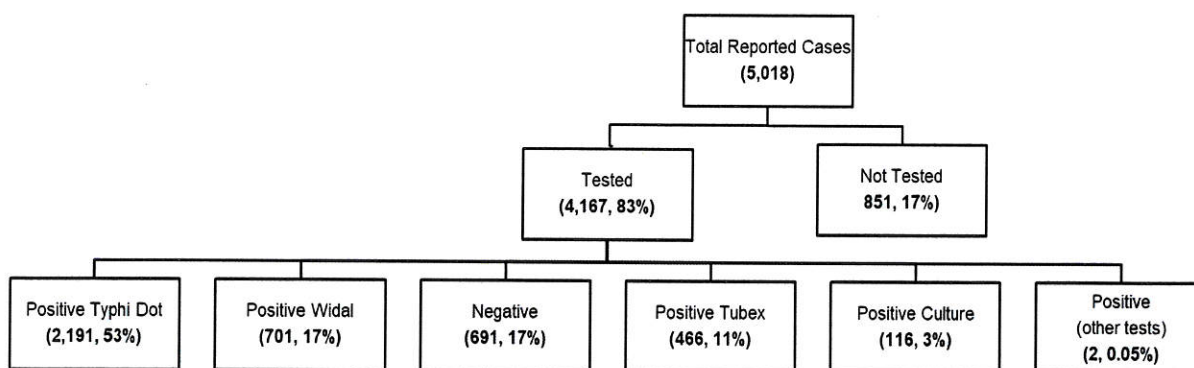


Note: 13 cases with unspecified age are not reflected in the graph

Laboratory Results

A total of 4,167 (83%) specimens were referred for testing. Laboratory status of reported typhoid fever cases is shown below (Figure 17).

Figure 17. Reported Typhoid Fever Cases by Laboratory Status (N=5,018)
Philippines, January 1 – March 30, 2019



Profile of Deaths

Four deaths (CFR=0.1%) out of the 5,018 reported typhoid fever cases were reported from Regions IV-A, VI, VII and IX. Age range from 20 to 36 years old (median: 26 years).



B. Confirmed Cases
Geographical Distribution

There was a 76% increase of confirmed typhoid fever cases from 66 cases in 2018 to 116 cases in 2019. Most of the reported cases were from the following regions: Region VIII (24 or 21%), Region IX (20 or 17%), Region II (17 or 15%), Region VII (17, 15%) and ARMM (13 or 11%) (Table 11).

Table 11. Confirmed Typhoid Fever Cases & Deaths by Region (n=116)
Philippines, 2019* vs 2018**

Region	2019		2018		% Change
	Cases	Deaths	Cases	Deaths	
PHILIPPINES	116	0	66	2	↑76
I	0	0	1	0	↓100
II	17	0	1	0	↑1,600
III	0	0	2	0	↓100
IV-A	3	0	4	0	↓25
MIMAROPA	2	0	3	0	↓33
V	0	0	2	0	↓100
VI	4	0	6	0	↓33
VII	17	0	18	1	↓6
VIII	24	0	14	1	↑71
IX	20	0	1	0	↑1,900
X	2	0	1	0	↑100
XI	0	0	1	0	↓100
XII	9	0	1	0	↑800
ARMM	13	0	3	0	↑333
CAR	2	0	0	0	↑
CARAGA	0	0	0	0	-
NCR	3	0	8	0	↓63

*From the period of January 1 – March 30, 2019

**From the period of January 1 – March 30, 2018

Profile of Cases

Age Group and Sex

Majority of the confirmed cases were female (61 or 53%). Age of cases ranged from 11 months to 85 years old (median age of 16 years). Most affected age group is 10 to 19 years old (38 or 33%) (Figure 18).

Figure 18. Confirmed Typhoid Fever Cases by Age Group and Sex (n=116)
Philippines, January 1 - March 30, 2019

