



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 28, 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	12,858	20	0.16	15,024	↓14
Confirmed Cholera	9	0	0.00	10	↓10
Confirmed Rotavirus	454	4	0.88	615	↓26
Hepatitis A	174	2	1.15	278	↓37
Typhoid Fever	19,650	33	0.17	17,149	↑15

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)

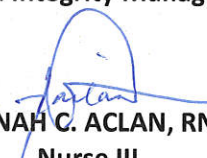
Editorial Board



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


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


VIKKI CARR D. DE LOS REYES, MD, PHSAE
Medical Specialist III


HERDIE L. HIZON
Supervising Health Program Officer
Data Integrity Manager


JEZZA JONAH C. ACLAN, RN, MPH
Nurse III

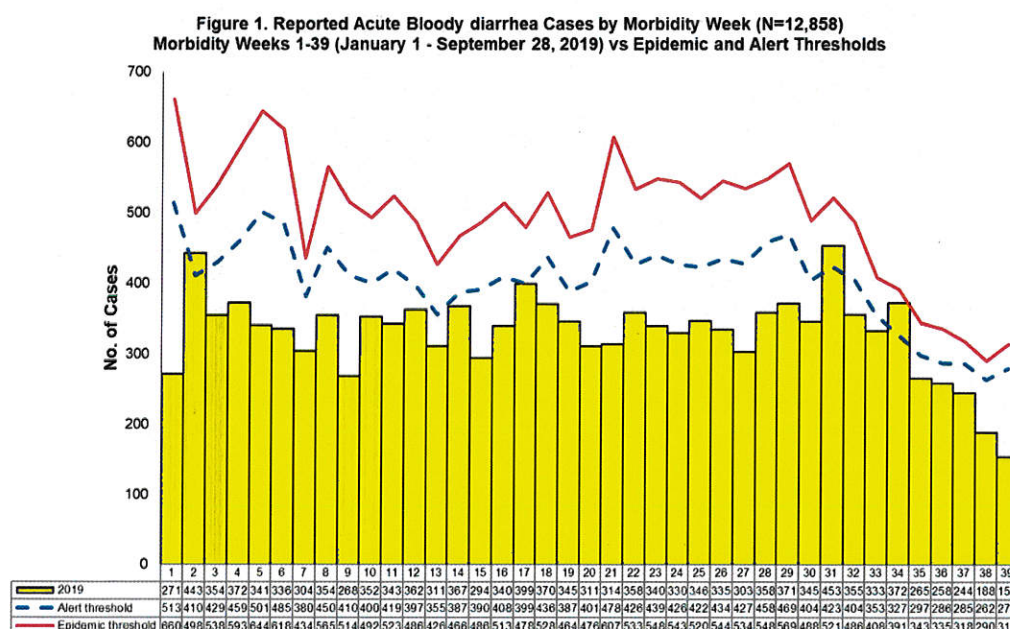

KRIS PAULINE D. MARTINEZ, RN
Nurse II



I. Acute Bloody Diarrhea (ABD)

Trend in the Philippines

A total of 12,858 acute bloody diarrhea cases were reported nationwide from January 1 to September 28, 2019. The distribution of cases for 2019 compared to epidemic and alert thresholds is shown below (Figure 1).



Geographical Distribution

There was a 14% decrease of reported ABD cases from 15,024 cases in 2018 to 12,858 cases in 2019 for the same period (January 1 – September 28, 2019). Most of the reported cases were from the following regions: Region VII (4,331 or 34%), Region IX (1,922 or 15%) and CARAGA (1,824 or 14%) (Table 2).

Table 2. Acute Bloody Diarrhea Cases & Deaths (N=12,858)
Philippines, 2019* vs 2018**

Region	2019		2018		% Change
	Cases	Deaths	Cases	Deaths	
PHILIPPINES	12,858	20	15,024	18	↓14
I	45	2	72	0	↓38
II	881	0	687	0	↑28
III	264	0	534	0	↓51
IV-A CALABARZON	515	0	724	0	↓29
IV-B MIMAROPA	55	0	112	0	↓51
V	89	0	24	0	↑271
VI	40	0	47	0	↓15
VII	4,331	14	5,569	15	↓22
VIII	262	0	286	0	↓8
IX	1,922	2	1,963	1	↓2
X	829	1	968	0	↓14
XI	148	0	126	0	↑17
XII	144	0	172	0	↓16
BARMM	227	0	135	1	↑68
CAR	1,210	1	1,290	0	↓6
Caraga	1,824	0	2,256	1	↓19
NCR	72	0	59	0	↑22

*From the period of January 1 to September 28, 2019

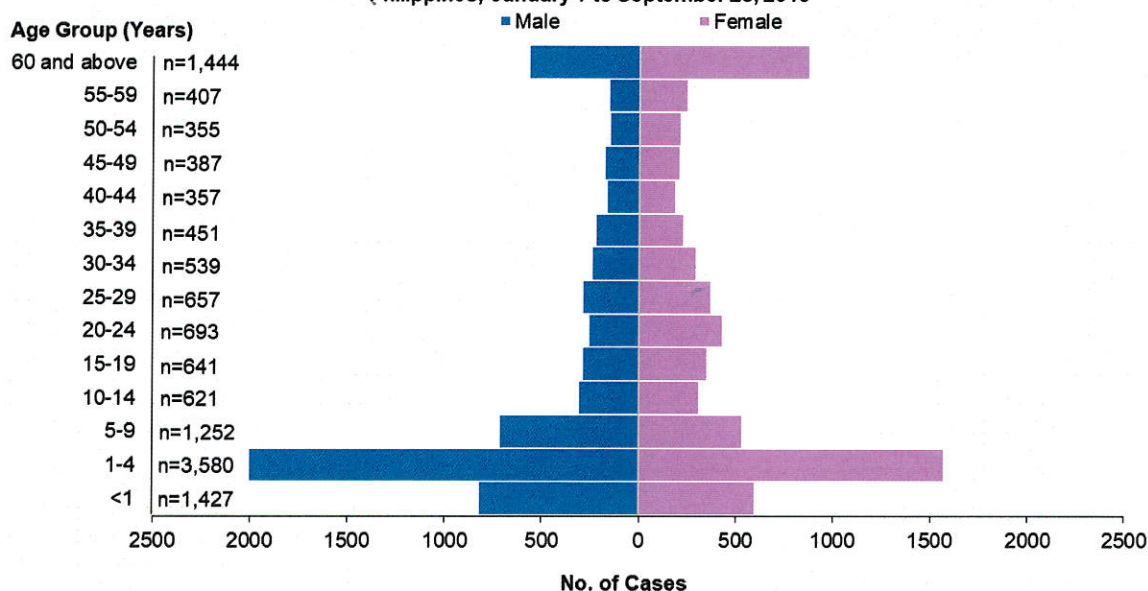
**From the period of January 1 to September 28, 2018



Profile of Cases

Almost equal distribution of reported ABD cases in males (6,414 or 50%) and females (6,444 or 50%) was noted. Age of cases ranged from less than 1 month to 102 years old (median age of 10 years). The most affected age group was 1 to 4 years old (3,580 or 28%) (Figure 2).

Figure 2. Acute Bloody Diarrhea Cases by Age Group and Sex (N=12,858)
Philippines, January 1 to September 28, 2019



Laboratory Results

A total of 8,441 (66%) samples were collected for laboratory testing (Figure 3). Of these, 7,353 (87%) yielded positive for different organisms. The frequently identified organism was *Entamoeba histolytica* (6,507 or 88%) (Table 3).

Figure 3. ABD Cases by Laboratory Result (N=12,858)
Philippines, January 1 – September 28, 2019

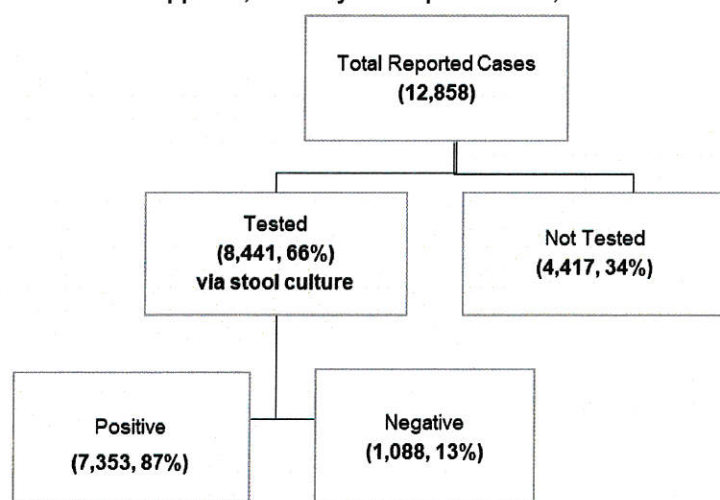


Table 3. Top 3 Organisms in ABD Cases
Philippines, January 1 – September 28, 2019

Organism	Cases
<i>Entamoeba histolytica</i>	6,507
<i>Shigella</i>	352
<i>Escherichia Coli</i>	215

Profile of Deaths

There were 20 deaths (CFR=0.2%) out of the 12,858 reported acute bloody diarrhea cases were reported from Regions I, VII, IX, X and CAR. Age range from less than 1 month to 86 years old (median: 29 years).

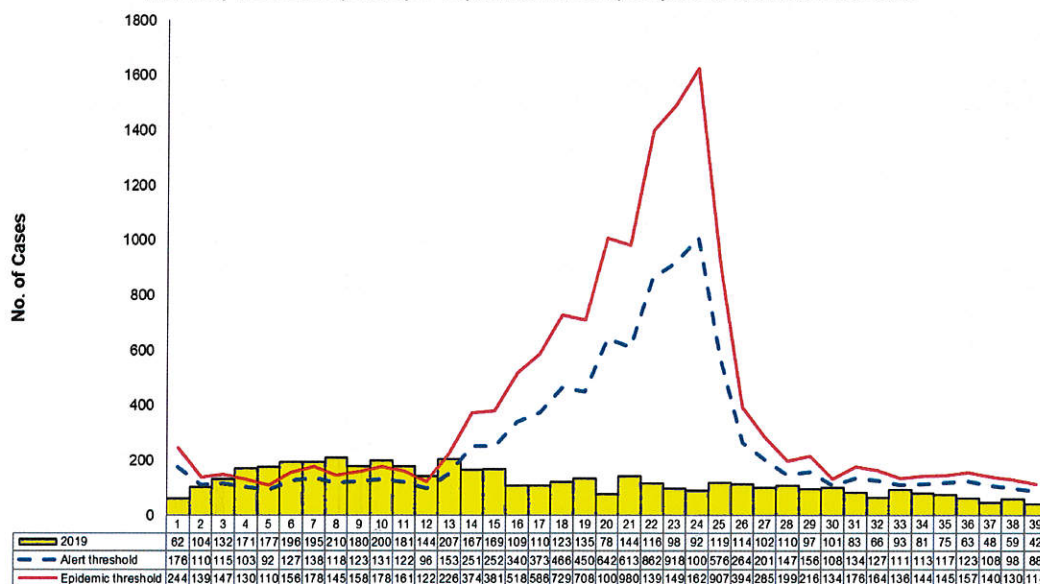


II. Cholera

Trend in the Philippines

A total of 4,753 reported cholera cases were reported nationwide from January 1 to September 28, 2019. The distribution of cases for 2019 compared to epidemic and alert thresholds is shown below (Figure 4).

Figure 4. Reported Cholera Cases by Morbidity Week (N=4,753)
Morbidity Weeks 1-39 (January 1 - September 28, 2019) vs Epidemic and Alert Thresholds



Geographical Distribution

There was a 188% increase of reported cholera cases from 1,652 cases in 2018 to 4,753 cases in 2019. Regions VIII (3,063 or 64%) reported the highest number of cholera cases from January 1 – September 28, 2019 (Table 4).

Table 4. Reported Cholera Cases & Deaths by Region (N=4,753)
Philippines, 2019* vs 2018**

Region	2019		2018		% Change
	Cases	Deaths	Cases	Deaths	
PHILIPPINES	4,753	8	1,652	6	↑188
I	1	0	0	0	↑
II	0	0	0	0	-
III	0	0	0	0	-
IV-A					
CALABARZON	1	0	11	1	↓91
MIMAROPA	2	0	6	0	↓67
V	391	2	573	5	↓32
VI	0	0	1	0	↓100
VII	1	0	2	0	↓50
VIII***	3,063	6	1	0	↑306,200
IX	7	0	0	0	↑
X	40	0	149	0	↓73
XI	1	0	15	0	↓93
XII	0	0	3	0	↓100
BARMM	2	0	3	0	↓33
CAR	0	0	3	0	↓100
Caraga	1,240	0	885	0	↑40
NCR	4	0	0	0	↑

*From the period of January 1 to September 28, 2019

**From the period of January 1 to September 28, 2018

*** Cases reported in 2018 EXCLUDES acute watery diarrhea that fits cholera case definition while cases in 2019 INCLUDES acute watery diarrhea cases.

*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.

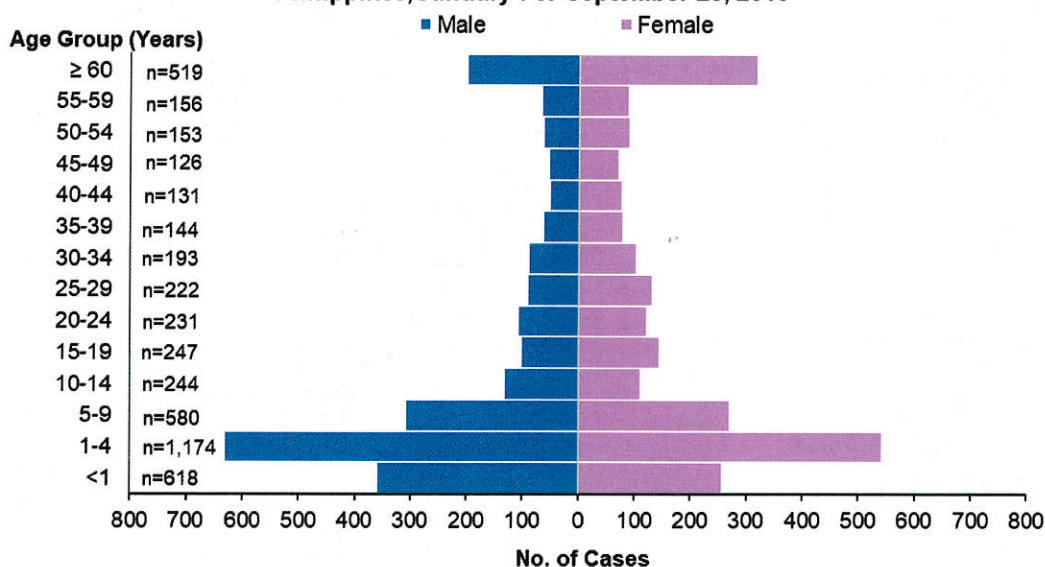
A PDF file of this report is available at www.doh.gov.ph/statistics.



Profile of Cases

Majority of the reported cases were female (2,418 or 51%). Age of suspect cases ranged from less than 1 month to 102 years old (median age of 9 years). The most affected age groups were 1 to 4 years (1,174 or 25%) followed by less than 1 year (618 or 13%) (Figure 5).

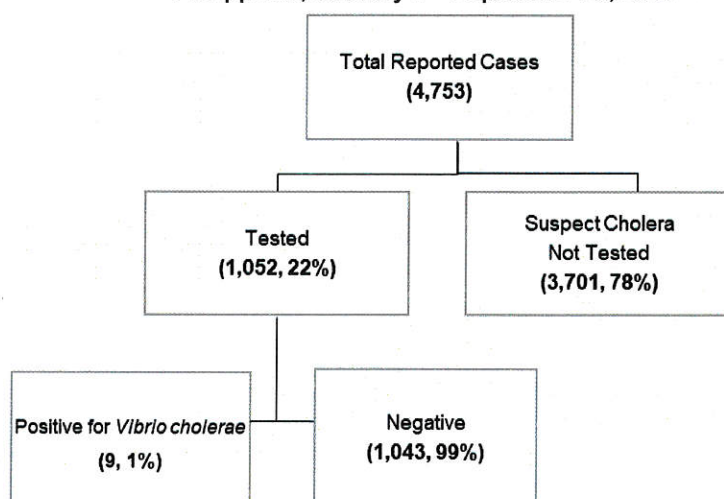
Figure 5. Reported Cholera Cases by Age Group and Sex (N=4,753)
Philippines, January 1 to September 28, 2019



Laboratory Results

A total of 1,052 (22%) samples were collected for laboratory testing (Figure 6). Of these, 9 (1%) yielded positive for *Vibrio cholerae*.

Figure 6. Cholera Cases by Laboratory Result (N=4,753)
Philippines, January 1 – September 28, 2019



Profile of Deaths

Eight deaths (CFR=0.17%) out of the 4,753 reported cholera cases were reported from Region V (Masbate and Sorsogon) and Region VIII (Eastern Samar and Samar). No deaths reported among confirmed cholera cases.

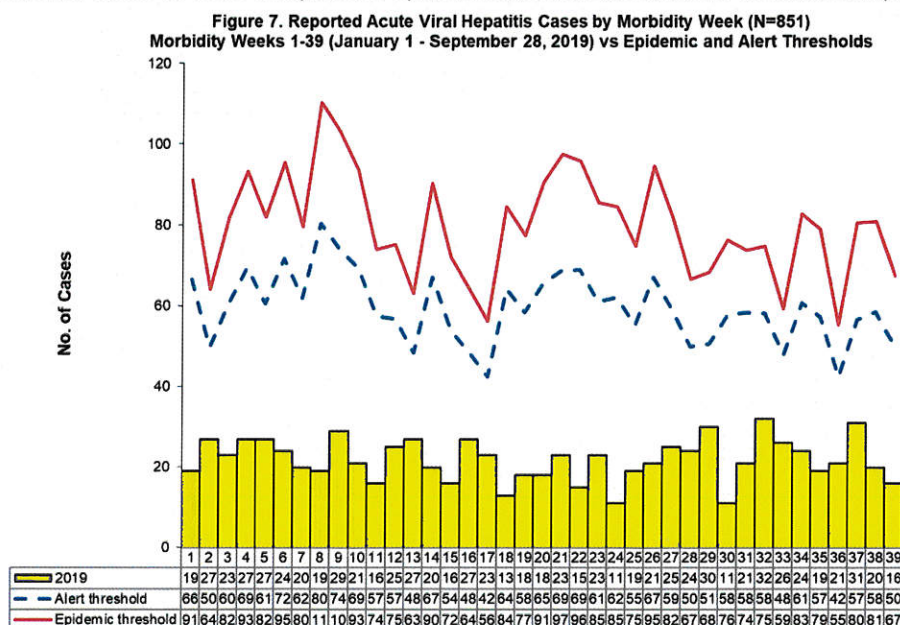


III. Hepatitis A

A. Reported Cases

Trend in the Philippines

A total of 851 reported acute viral hepatitis cases were reported nationwide from January 1 to September 28, 2019. The distribution of cases for 2019 compared to epidemic and alert thresholds is shown below (Figure 7).



Geographical Distribution

There was a 28% decrease of reported acute viral hepatitis cases from 1,180 cases in 2018 to 851 cases in 2019. Most of the reported cases were from the following regions: Region IX (135 or 16%), Region VI (119 or 14%) and Region IV-A (107 or 13%) (Table 6).

Table 6. Reported Acute Viral Hepatitis Cases & Deaths by Region (N=851)
Philippines, 2019* vs 2018**

Region	2019		2018		% Change
	Cases	Deaths	Cases	Deaths	
PHILIPPINES	851	11	1,180	12	↓28
I	35	0	31	1	↑13
II	23	0	21	0	↑10
III	34	0	57	0	↓40
IV-A	107	2	95	0	↑13
MIMAROPA	18	0	26	0	↓31
V	12	0	22	1	↓45
VI	119	1	254	0	↓53
VII	74	8	230	9	↓68
VIII	3	0	5	0	↓40
IX	135	0	53	0	↑155
X	70	0	109	0	↓36
XI	25	0	15	0	↑67
XII	14	0	22	0	↓36
BARMM	36	0	25	0	↑44
CAR	3	0	11	0	↓73
Caraga	43	0	83	0	↓48
NCR	100	0	121	1	↓17

*From the period of January 1 to September 28, 2019

**From the period of January 1 to September 28, 2018

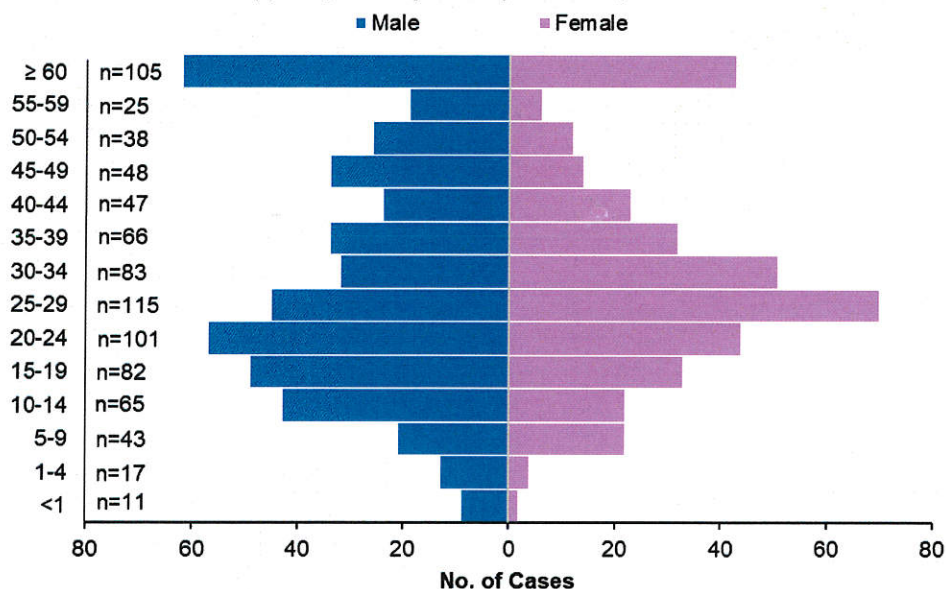


Profile of Cases

Age Group and Sex

Majority of the reported cases were male (471 or 55%). Age of cases ranged from less than 1 month to 92 years old (median age of 29 years). Most of the cases were 25 to 29 years old (115 or 14%) (Figure 8).

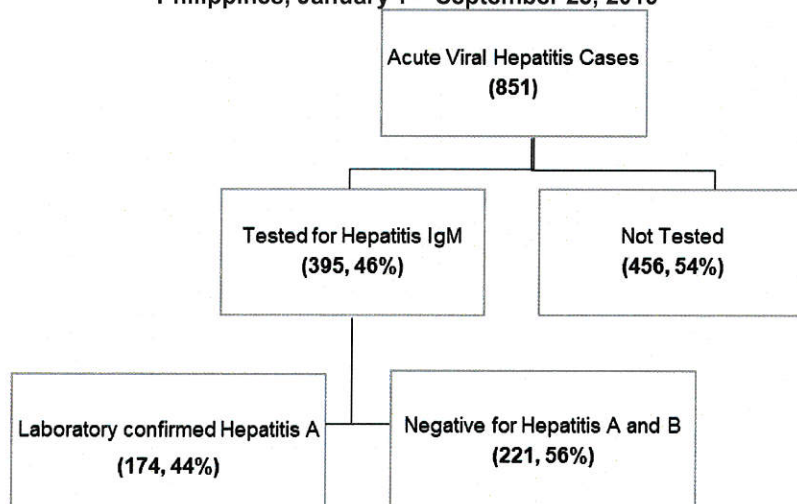
Figure 8. Acute Viral Hepatitis Cases by Age Group and Sex (N=851)
Philippines, January 1 to September 28, 2019



Laboratory Status

A total of 395 (46%) reported cases were tested for Hepatitis A IgM. Among those tested, 174 (44%) were positive for Hepatitis A (Figure 9).

Figure 9. Acute Viral Hepatitis Cases by Case Classification (N=851)
Philippines, January 1 – September 28, 2019



Profile of Deaths

Eleven deaths (CFR=1%) out of the 851 reported acute viral hepatitis cases were reported from Regions IV-A (2 cases in Cavite), Region VI (1 case in Iloilo) and Region VII (7 cases in Cebu and 1 case in Bohol).



B. Confirmed Cases

Geographical Distribution

There was a 37% decrease of confirmed Hepatitis A cases from 278 cases in 2018 to 174 cases in 2019 for the same period (January 1 – September 28, 2019). Region VII (29 or 17%) and Region IX (29 or 17%) reported the highest number of Hepatitis A cases followed by NCR (24 or 14%) as shown below (Table 7).

Table 7. Confirmed Hepatitis A Cases & Deaths by Region (n=174)
Philippines, 2019* vs 2018**

Region	2019		2018		% Change
	Cases	Deaths	Cases	Deaths	
PHILIPPINES	174	2	278	0	↓37
I	12	0	1	0	↑1,100
II	2	0	8	0	↓75
III	5	0	3	0	↑67
IV-A	15	0	19	0	↓21
MIMAROPA	2	0	3	0	↓33
V	1	0	3	0	↓67
VI	18	1	96	0	↓81
VII	29	1	73	0	↓60
VIII	0	0	1	0	↓100
IX	29	0	16	0	↑81
X	19	0	9	0	↑111
XI	1	0	1	0	0
XII	5	0	7	0	↓29
BARMM	6	0	4	0	↑50
CAR	2	0	5	0	↓60
Caraga	4	0	12	0	↓67
NCR	24	0	17	0	↑41

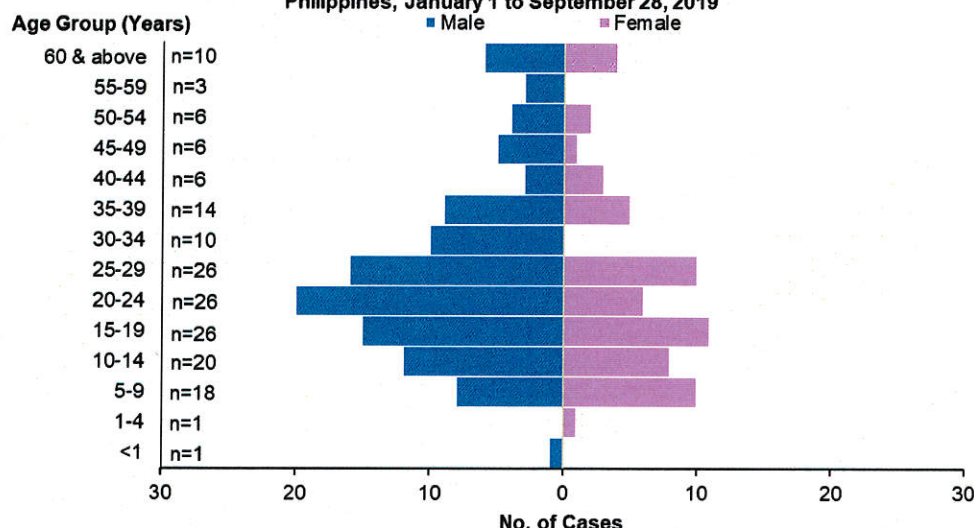
*From the period of January 1 to September 28, 2019

**From the period of January 1 to September 28, 2018

Profile of Cases

Majority of the cases were male (113 or 65%). Age of cases ranged from 2 months to 80 years old (median age of 23 years). The most affected age group were 15 to 19 years (26 or 16%), 20 to 24 years (26 or 15%) and 25 to 29 years (26 or 15%) (Figure 10).

Figure 10. Confirmed Hepatitis A Cases by Age Group and Sex (n=174)
Philippines, January 1 to September 28, 2019



Profile of Deaths

Two deaths (CFR=1%) out of the 174 confirmed hepatitis A cases were reported from Region VI (Iloilo) and Region VII (Cebu).



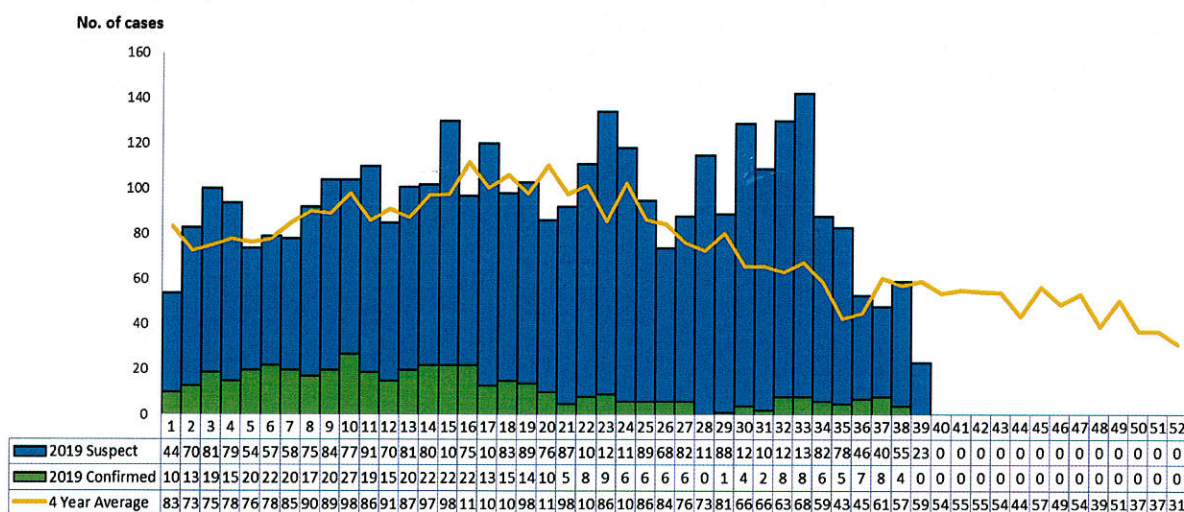
IV. Rotavirus

A. Reported Cases

Trend in the Philippines

A total of 3,674 reported rotavirus cases were reported nationwide from January 1 to September 28, 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=3,674)
Philippines, January 1- September 28, 2019 vs 4 Year Average Data



*same time period

Geographical Distribution

There was a 56% increase of reported Rotavirus cases from 2,353 cases in 2018 to 3,674 cases in 2019. Most of the reported cases were from the following regions: Region VIII (1,287 or 35%), Region V (640 or 17%), Region I (526 or 14%), BARMM (421 or 11%) and Region XII (339 or 9%) (Table 8).

Table 8. Reported Rotavirus Cases & Deaths by Region (N=3,674)
Philippines, 2019* vs 2018**

Region	2019		2018		% Change
	Cases	Deaths	Cases	Deaths	
PHILIPPINES	3,674	34	2,353	21	↑56
I***	526	4	536	6	↓2
II	0	0	0	0	-
III	2	0	4	0	↓50
IV-A	2	0	7	0	↓71
MIMAROPA***	85	0	184	0	↓54
V***	640	2	278	0	↑130
VI***	133	1	277	0	↓52
VII	3	0	1	0	↑200
VIII	1,287	4	0	0	↑
IX	0	0	0	0	-
X	4	0	1	0	↑300
XI	0	0	0	0	-
XII***	339	3	382	4	↓11
BARMM	421	19	455	11	↓7
CAR	0	0	0	0	-
Caraga***	145	0	52	0	↑179
NCR***	87	1	176	0	↓51

*From the period of January 1 – September 28, 2019

**From the period of January 1 – September 28, 2018

***Region with selected rotavirus sentinel sites

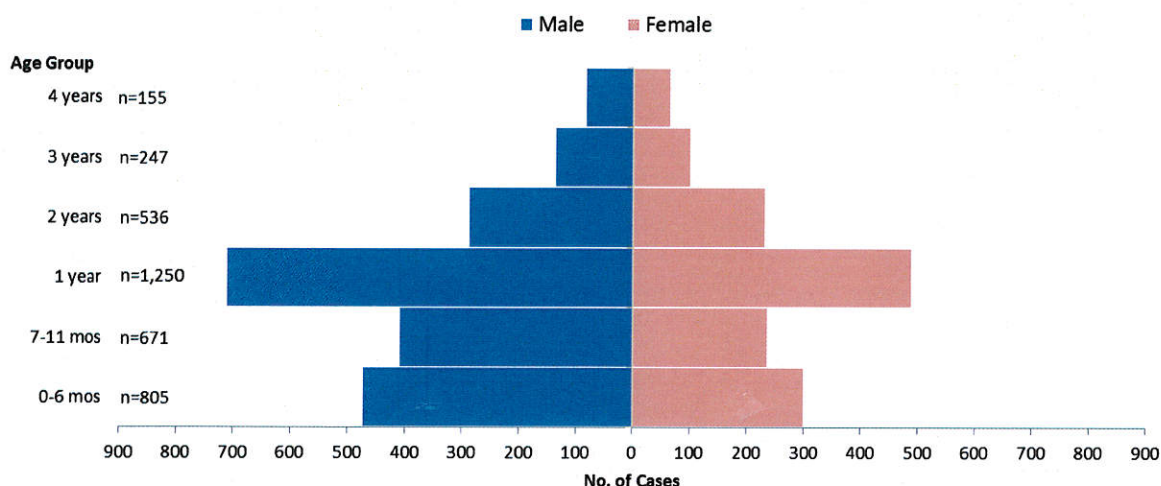


Profile of Cases

Age Group and Sex

Majority of the reported cases were male (2,111 or 57%). 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 (1,250 or 34%) (Figure 12).

Figure 12. Reported Rotavirus Cases by Age Group and Sex (N=3,674)
Philippines, January 1 – September 28, 2019



Note: 10 cases with unspecified age are not reflected in the graph

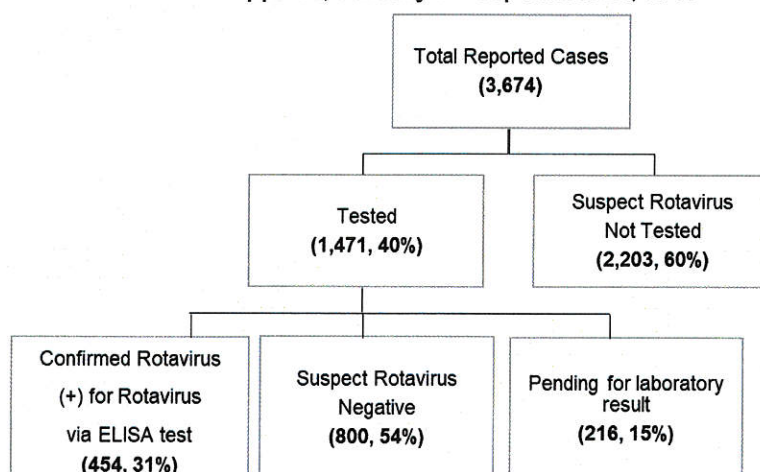
Vaccination Status

Majority of reported rotavirus cases were not vaccinated with rotavirus vaccine (3,636 or 99%). Meanwhile, there were vaccinated cases as follows: 1 dose (11 or 0.3%), 2 doses or more doses (13 or 0.4%) and vaccinated with unknown number of dose (14 or 0.4%).

Laboratory Results

A total of 1,471 (40%) samples were collected for laboratory testing. Of these, 454 (31%) were laboratory confirmed for rotavirus and 800 (54%) were negative (Figure 13).

Figure 13. Reported Rotavirus Cases by Laboratory Status (N=3,674)
Philippines, January 1 – September 28, 2019



Profile of Deaths

Thirty-four deaths (CFR=1%) out of the 3,674 reported rotavirus cases were reported from Regions I (4 cases), V (2 cases), VI (1 case), VIII (4 cases), XII (3 cases), BARMM (19 cases) and NCR (1 case). Four (4) confirmed rotavirus deaths were reported from Pangasinan (2 cases) and Maguindanao (2 cases).



B. Confirmed Cases

Geographical Distribution

There was a 26% decrease of confirmed Rotavirus cases from 615 cases in 2018 to 454 cases in 2019. Most of the reported cases were from the following regions: Region I (205 or 45%), Region V (69 or 15%) and BARMM (52 or 11%) (Table 9).

Table 9. Confirmed Rotavirus Cases & Deaths by Region (n=454)
Philippines, 2019* vs 2018**

Region	2019		2018		% Change
	Cases	Deaths	Cases	Deaths	
PHILIPPINES	454	4	615	1	↓26
I***	205	2	212	1	↓3
II	0	0	0	0	-
III	1	0	3	0	↓67
IV-A	0	0	4	0	↓100
MIMAROPA***	0	0	2	0	↓100
V***	69	0	54	0	↑28
VI***	41	0	104	0	↓61
VII	1	0	0	0	↑
VIII	0	0	0	0	-
IX	0	0	0	0	-
X	1	0	0	0	↑
XI	0	0	0	0	-
XII***	41	0	76	0	↓46
BARMM	52	2	93	0	↓44
CAR	0	0	0	0	-
Caraga***	29	0	15	0	↑93
NCR***	14	0	52	0	↓73

*From the period of January 1 – September 28, 2019

**From the period of January 1 – September 28, 2018

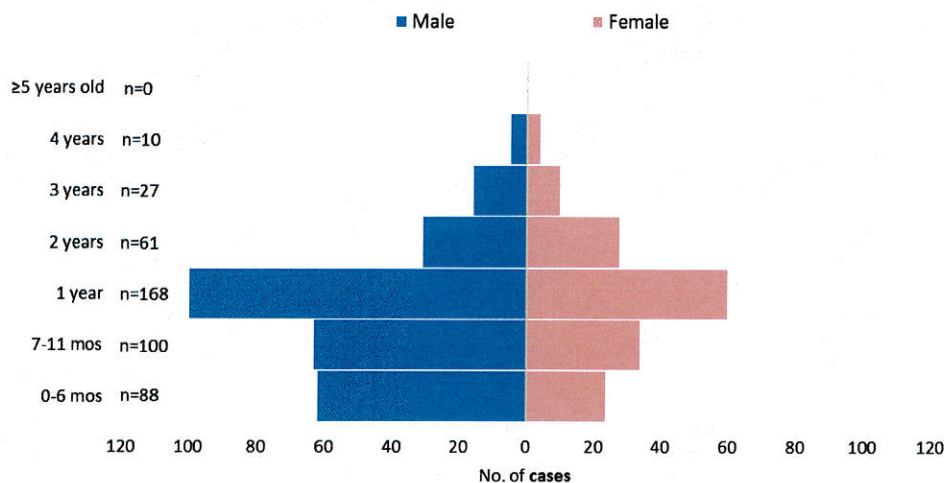
***Region with selected rotavirus sentinel sites

Profile of Cases

Age Group and Sex

Majority of the confirmed cases were male (277 or 61%). 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 (168 or 37%) (Figure 14).

Figure 14. Confirmed Rotavirus Cases by Age group, Sex and Case Classification (n=454)
Philippines, January 1- September 28, 2019



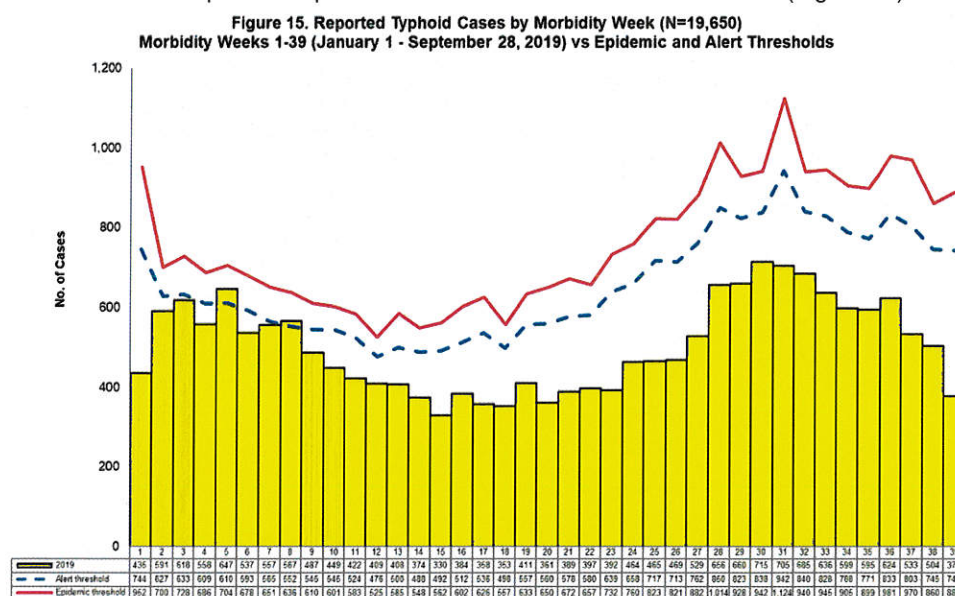


V. Typhoid Fever

A. Reported Cases

Trend in the Philippines

A total of 19,650 reported typhoid fever cases were reported nationwide from January 1 to September 28, 2019. The distribution of cases for 2019 compared to epidemic and alert thresholds is shown below (Figure 15).



Geographical Distribution

There was a 15% increase of reported typhoid fever cases from 17,149 cases in 2018 to 19,650 cases in 2019. Most of the reported cases were from the following regions: Region X (3,282 or 17%), CAR (2,998 or 15%), Region VI (2,149 or 11%), Region XII (1,830 or 9%) and BARMM (1,422 or 7%) (Table 10).

Table 10. Reported Typhoid Fever Cases & Deaths by Region (N=19,650)
Philippines, 2019* vs 2018**

Region	2019		2018		% Change
	Cases	Deaths	Cases	Deaths	
PHILIPPINES	19,650	33	17,149	27	↑15
I	1,266	2	665	0	↑90
II	662	1	455	0	↑45
III	549	0	451	0	↑22
IV-A	1,326	2	1,356	0	↓2
MIMAROPA	317	2	279	0	↑14
V	195	3	263	2	↓26
VI	2,149	4	2,047	5	↑5
VII	1,179	5	1,057	6	↑12
VIII	323	1	572	2	↓44
IX	1,177	5	996	3	↑18
X	3,282	0	3,290	1	↓0.2
XI	220	0	158	0	↑39
XII	1,830	1	1,499	2	↑22
BARMM	1,422	6	1,284	1	↑11
CAR	2,998	1	1,703	0	↑76
Caraga	365	0	724	0	↓50
NCR	390	0	350	5	↑11

*From the period of January 1 – September 28, 2019

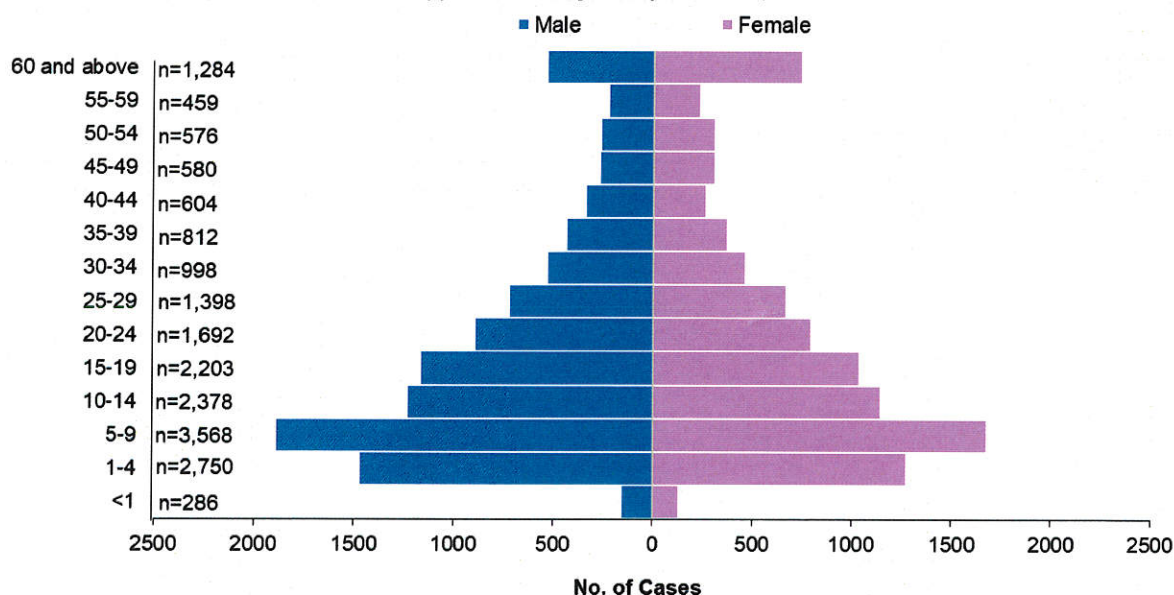
**From the period of January 1 – September 28, 2018



Profile of Cases

Majority of the reported cases were male (10,184 or 52%). Age of cases ranged from less than 1 month to 100 years old (median age of 16 years). The most affected age group was 5 to 9 years old (3,568 or 18%) (Figure 16).

Figure 16. Reported Typhoid Fever Cases by Age Group and Sex (N=19,650)
Philippines, January 1 - September 28, 2019

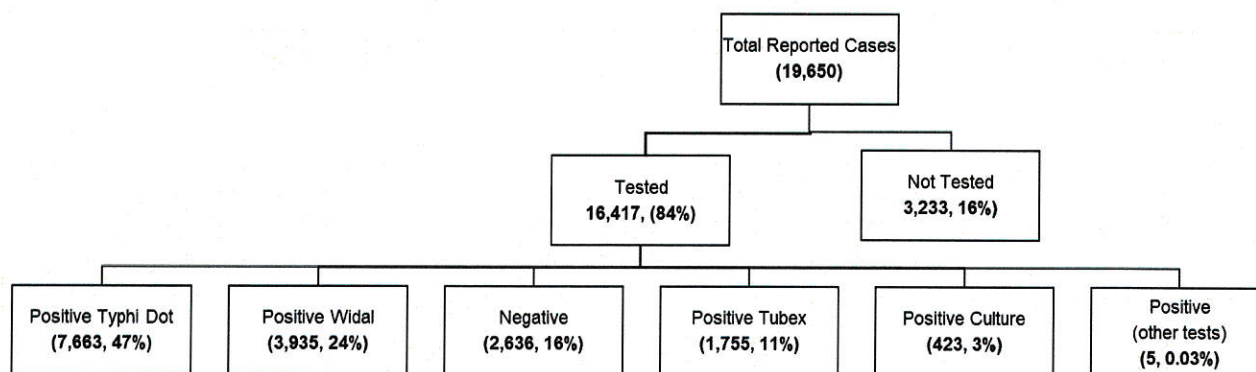


Note: 62 cases with unspecified age are not reflected in the graph

Laboratory Results

A total of 16,417 (84%) 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=19,650)
Philippines, January 1 – September 28, 2019



Profile of Deaths

Thirty-three deaths (CFR=0.2%) out of the 19,650 reported typhoid fever cases. Age range from 7 days to 73 years old (median: 39 years).



B. Confirmed Cases

Geographical Distribution

There was an 49% increase of confirmed typhoid fever cases from 284 cases in 2018 to 423 cases in 2019. Most of the reported cases were from the following regions: Region IX (72 or 17%), Region VIII (71 or 17%), BARMM (70 or 17%), Region VII (44 or 10%) and Region I (33 or 8%) (Table 11).

Table 11. Confirmed Typhoid Fever Cases & Deaths by Region (n=423)
Philippines, 2019* vs 2018**

Region	2019		2018		% Change
	Cases	Deaths	Cases	Deaths	
PHILIPPINES	423	0	284	3	↑49
I	33	0	6	0	↑450
II	31	0	20	0	↑55
III	2	0	6	0	↓67
IV-A	8	0	7	0	↑14
MIMAROPA	3	0	7	0	↓57
V	6	0	3	0	↑100
VI	16	0	8	0	↑100
VII	44	0	50	1	↓12
VIII	71	0	61	1	↑16
IX	72	0	46	0	↑57
X	5	0	12	0	↓58
XI	8	0	4	0	↑100
XII	24	0	4	0	↑500
BARMM	70	0	15	0	↑367
CAR	6	0	3	0	↑100
Caraga	3	0	6	0	↓50
NCR	21	0	26	1	↓19

*From the period of January 1 – September 28, 2019

**From the period of January 1 – September 28, 2018

Profile of Cases

Age Group and Sex

Majority of the confirmed cases were male (216 or 51%). Age of cases ranged from 2 months to 85 years old (median age of 15 years). Most affected age group is 5 to 9 years old (85 or 20%) (Figure 18).

Figure 18. Confirmed Typhoid Fever Cases by Age Group and Sex (n=423)
Philippines, January 1 - September 28, 2019

