



Food and Waterborne Diseases

Food and waterborne illnesses are conditions caused by eating or drinking food or water that is contaminated by microorganisms or the toxins they produce. It typically causes gastrointestinal symptoms such as abdominal pain, nausea, vomiting, and diarrhea. The mode of transmission is fecal-oral route. This summary report presents routinely collected FWBD data for the period of January 1 to August 31, 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	11,594	14	0.12	13,921	↓17
Confirmed Cholera	7	0	0.00	10	↓30
Confirmed Rotavirus	410	3	0.73	559	↓27
Hepatitis A	152	2	1.32	257	↓41
Typhoid Fever	16,888	30	0.18	15,293	↑10

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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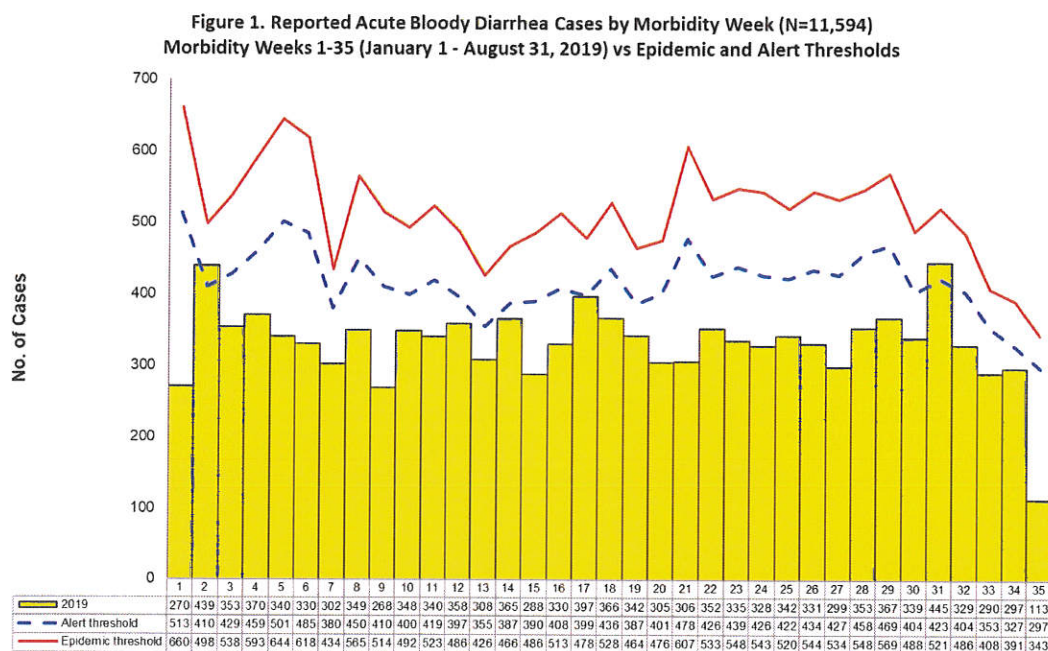
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I. Acute Bloody Diarrhea (ABD)

Trend in the Philippines

A total of 11,594 acute bloody diarrhea cases were reported nationwide from January 1 to August 31, 2019. The distribution of cases for 2019 compared to epidemic and alert thresholds is shown below (Figure 1).



Geographical Distribution

There was a 17% decrease of reported ABD cases from 13,921 cases in 2018 to 11,594 cases in 2019 for the same period (January 1 – August 31, 2019). Most of the reported cases were from the following regions: Region VII (3,846 or 33%), Region IX (1,734 or 15%) and CARAGA (1,673 or 14%) (Table 2).

Table 2. Acute Bloody Diarrhea Cases & Deaths (N=11,594)
Philippines, 2019* vs 2018**

Region	2019		2018		% Change
	Cases	Deaths	Cases	Deaths	
PHILIPPINES	11,594	14	13,921	16	↓17
I	39	1	69	0	↓43
II	797	0	623	0	↑28
III	242	0	480	0	↓50
IV-A CALABARZON	420	0	671	0	↓37
IV-B MIMAROPA	41	0	104	0	↓61
V	84	0	24	0	↑250
VI	35	0	41	0	↓15
VII	3,846	9	5,263	14	↓27
VIII	234	0	256	0	↓9
IX	1,734	2	1,769	1	↓2
X	771	1	946	0	↓18
XI	137	0	111	0	↑23
XII	138	0	154	0	↓10
BARMM	210	0	121	0	↑74
CAR	1,130	1	1,178	0	↓4
Caraga	1,673	0	2,060	1	↓19
NCR	63	0	51	0	↑24

*From the period of January 1 to August 31, 2019

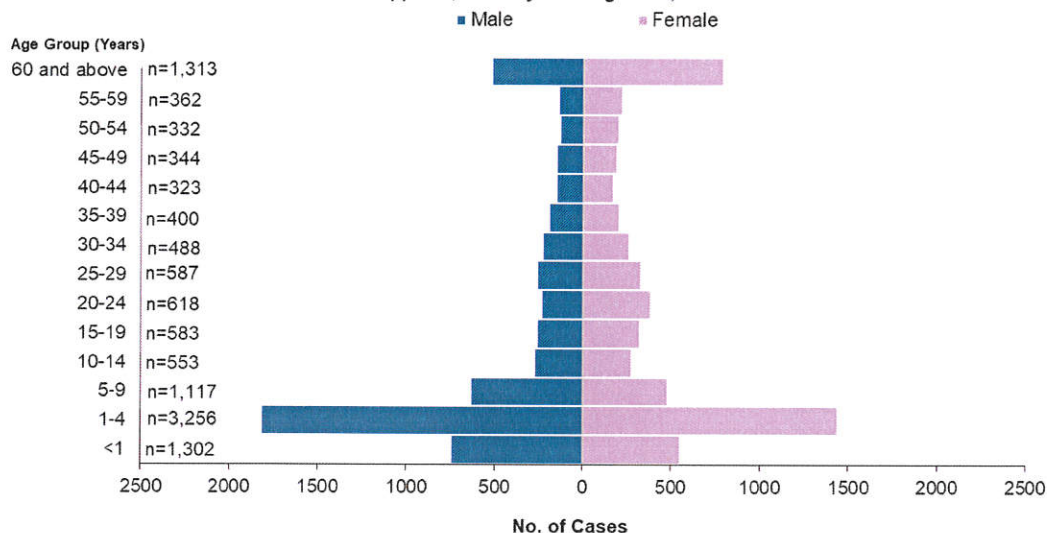
**From the period of January 1 to August 31, 2018



Profile of Cases

Almost equal distribution of reported ABD cases in males (5,768 or 50%) and females (5,826 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 (3,256 or 28%) (Figure 2).

Figure 2. Acute Bloody Diarrhea Cases by Age Group and Sex (N=11,594)
Philippines, January 1 to August 31, 2019



Laboratory Results

A total of 7,660 (66%) samples were collected for laboratory testing (Figure 3). Of these, 6,648 (87%) yielded positive for different organisms. The frequently identified organism was *Entamoeba histolytica* (5,863 or 88%) (Table 3).

Figure 3. ABD Cases by Laboratory Result (N=11,594)
Philippines, January 1 – August 31, 2019

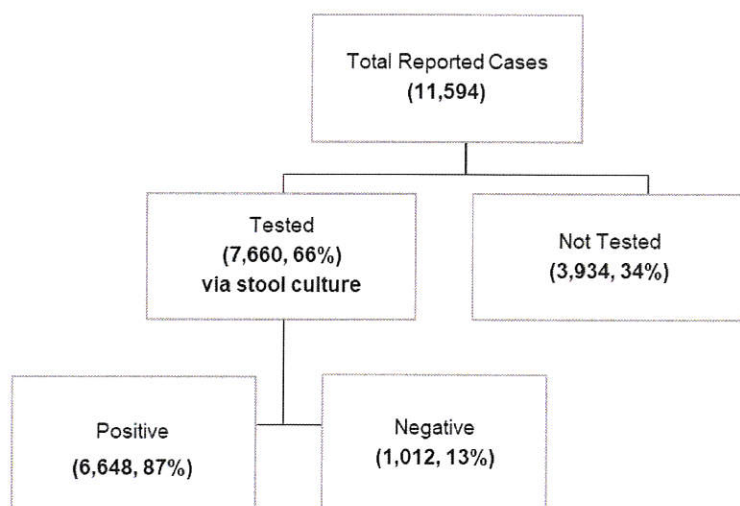


Table 3. Top 3 Organisms in ABD Cases
Philippines, January 1 – August 31, 2019

Organism	Cases
<i>Entamoeba histolytica</i>	5,863
<i>Shigella</i>	352
<i>Escherichia Coli</i>	187

Profile of Deaths

There were 14 deaths (CFR=0.1%) out of the 11,594 reported acute bloody diarrhea cases were reported from Regions I, VII, IX, X and CAR. Age range from less than 1 month to 76 years old (median: 18 years).

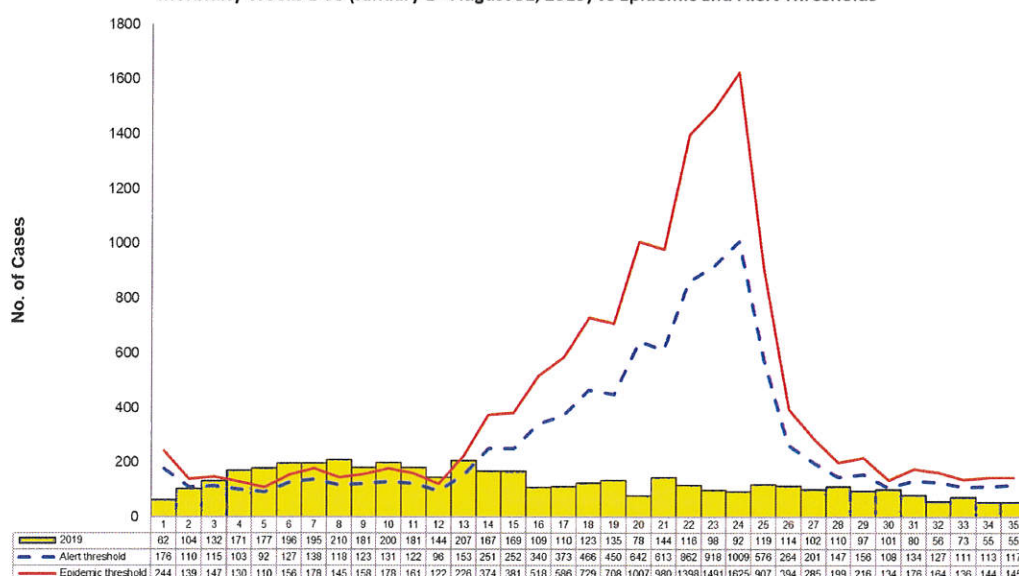


II. Cholera

Trend in the Philippines

A total of 4,463 reported cholera cases were reported nationwide from January 1 to August 31, 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=4,463)
Morbidity Weeks 1-35 (January 1 - August 31, 2019) vs Epidemic and Alert Thresholds



Geographical Distribution

There was a 195% increase of reported cholera cases from 1,512 cases in 2018 to 4,463 cases in 2019. Regions VIII (2,873 or 64%) reported the highest number of cholera cases from January 1 – August 31, 2019 (Table 4).

Table 4. Reported Cholera Cases & Deaths by Region (N=4,463)
Philippines, 2019* vs 2018**

Region	2019		2018		% Change
	Cases	Deaths	Cases	Deaths	
PHILIPPINES	4,463	8	1,512	6	↑195
I	1	0	0	0	↑
II	0	0	0	0	-
III	0	0	0	0	-
IV-A CALABARZON	1	0	11	1	↓91
MIMAROPA	0	0	6	0	↓100
V	367	2	527	5	↓30
VI	0	0	1	0	↓100
VII	1	0	2	0	↓50
VIII	2,873	6	0	0	↑
IX	7	0	0	0	↑
X	40	0	147	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	1,167	0	794	0	↑47
NCR	3	0	0	0	↑

*From the period of January 1 to August 31, 2019

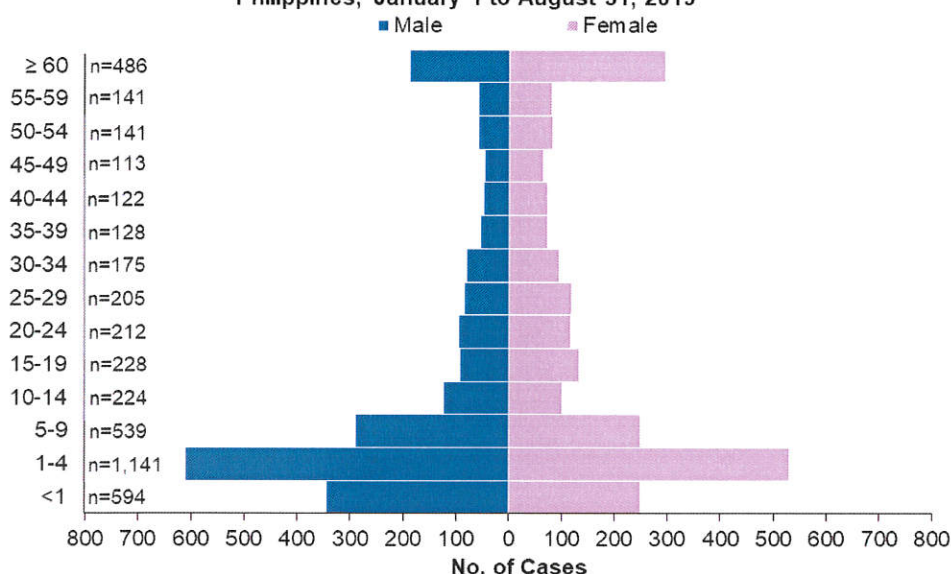
**From the period of January 1 to August 31, 2018



Profile of Cases

Majority of the reported cases were female (2,266 or 51%). Age of suspect cases ranged from less than 1 month to 96 years old (median age of 9 years). The most affected age groups were 1 to 4 years (1,141 or 26%) followed by less than 1 year (594 or 13%) (Figure 5).

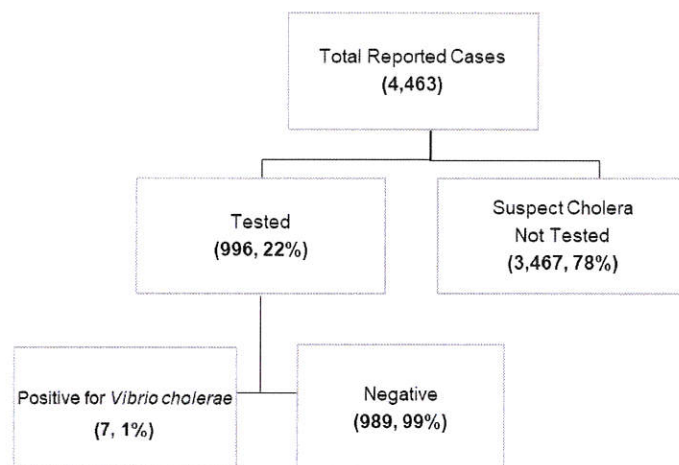
Figure 5. Reported Cholera Cases by Age Group and Sex (N=4,463)
Philippines, January 1 to August 31, 2019



Laboratory Results

A total of 996 (22%) samples were collected for laboratory testing (Figure 6). Of these, 7 (1%) yielded positive for *Vibrio cholerae*.

Figure 6. Cholera Cases by Laboratory Result (N=4,463)
Philippines, January 1 – August 31, 2019



Profile of Deaths

Eight deaths (CFR=0.18%) out of the 4,463 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.

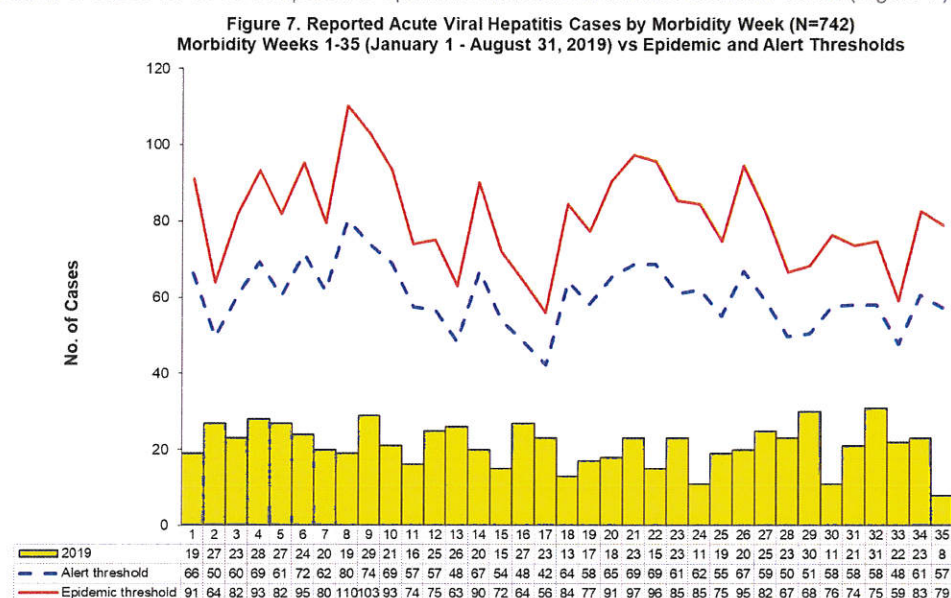


III. Hepatitis A

A. Reported Cases

Trend in the Philippines

A total of 742 reported acute viral hepatitis cases were reported nationwide from January 1 to August 31, 2019. The distribution of cases for 2019 compared to epidemic and alert thresholds is shown below (Figure 7).



Geographical Distribution

There was a 31% decrease of reported acute viral hepatitis cases from 1,081 cases in 2018 to 742 cases in 2019. Most of the reported cases were from the following regions: Region IX (118 or 16%), Region VI (108 or 15%) and Region IV-A (90 or 12%) (Table 6).

Table 6. Reported Acute Viral Hepatitis Cases & Deaths by Region (N=742)
Philippines, 2019* vs 2018**

Region	2019		2018		% Change
	Cases	Deaths	Cases	Deaths	
PHILIPPINES	742	7	1,081	9	↓31
I	30	0	29	1	↑3
II	20	0	19	0	↑5
III	29	0	51	0	↓43
IV-A	90	2	90	0	0
MIMAROPA	13	0	25	0	↓48
V	7	0	21	1	↓67
VI	108	1	238	0	↓55
VII	64	4	208	7	↓69
VIII	3	0	4	0	↓25
IX	118	0	44	0	↑168
X	69	0	103	0	↓33
XI	19	0	9	0	↑111
XII	14	0	19	0	↓26
BARMM	33	0	22	0	↑50
CAR	3	0	11	0	↓73
Caraga	33	0	77	0	↓57
NCR	89	0	111	0	↓20

*From the period of January 1 to August 31, 2019

**From the period of January 1 to August 31, 2018

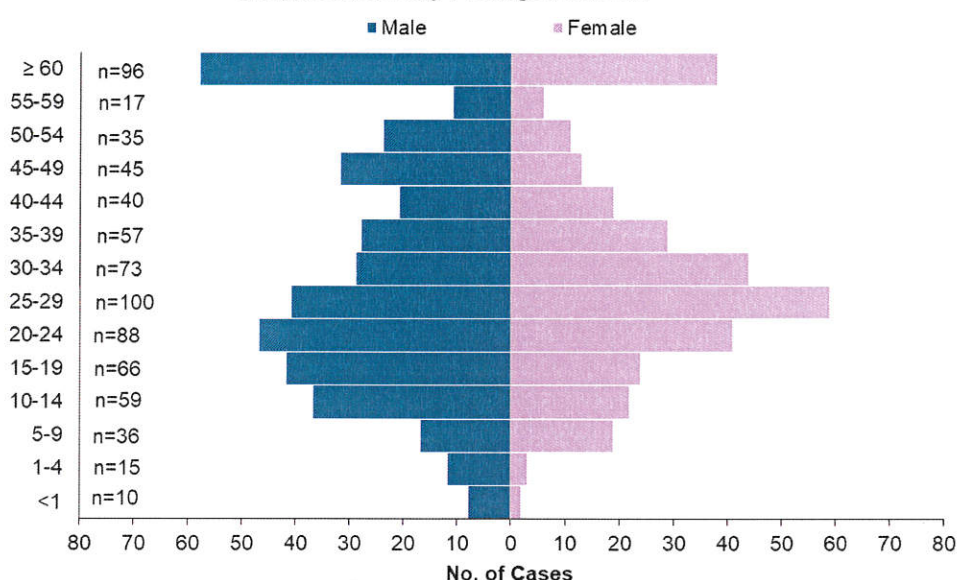


Profile of Cases

Age Group and Sex

Majority of the reported cases were male (410 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 (100 or 13%) (Figure 8).

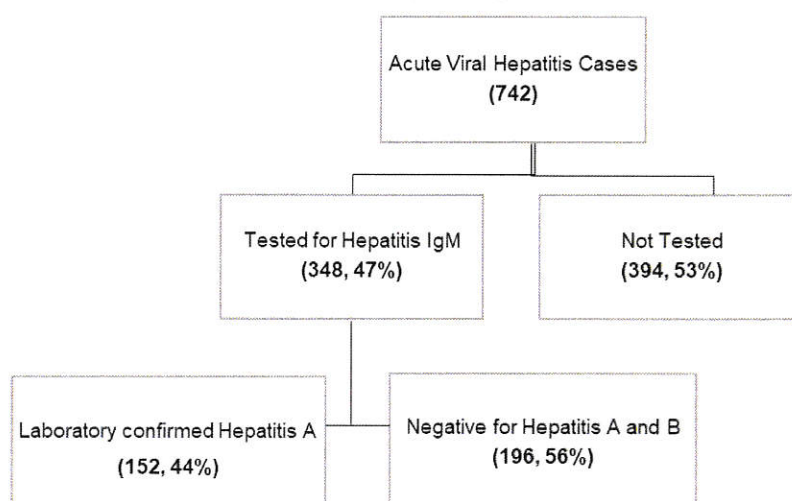
Figure 8. Acute Viral Hepatitis Cases by Age Group and Sex (N=742)
Philippines, January 1 to August 31, 2019



Laboratory Status

A total of 348 (47%) reported cases were tested for Hepatitis A IgM. Among those tested, 152 (44%) were positive for Hepatitis A (Figure 9).

Figure 9. Acute Viral Hepatitis Cases by Case Classification (N=742)
Philippines, January 1 – August 31, 2019



Profile of Deaths

Seven deaths (CFR=1%) out of the 742 reported acute viral hepatitis cases were reported from Regions IV-A (2 cases in Cavite), Region VI (1 case in Iloilo) and Region VII (3 cases in Cebu and 1 case in Bohol).



B. Confirmed Cases

Geographical Distribution

There was a 41% decrease of confirmed Hepatitis A cases from 257 cases in 2018 to 152 cases in 2019 for the same period (January 1 – August 31, 2019). Region IX (26 or 17%) reported the highest number of Hepatitis A cases followed by Region VII (25 or 16%), NCR (22 or 14%) as shown below (Table 7).

Table 7. Confirmed Hepatitis A Cases & Deaths by Region (n=152)
Philippines, 2019* vs 2018**

Region	2019		2018		% Change
	Cases	Deaths	Cases	Deaths	
PHILIPPINES	152	2	257	0	↓41
I	11	0	1	0	↑1,000
II	2	0	8	0	↓75
III	5	0	2	0	↑150
IV-A	10	0	17	0	↓41
MIMAROPA	1	0	3	0	↓67
V	1	0	3	0	↓67
VI	16	1	92	0	↓83
VII	25	1	66	0	↓62
VIII	0	0	0	0	-
IX	26	0	16	0	↑63
X	18	0	8	0	↑125
XI	1	0	1	0	0
XII	5	0	4	0	↑25
BARMM	4	0	4	0	0
CAR	2	0	5	0	↓60
Caraga	3	0	11	0	↓73
NCR	22	0	16	0	↑38

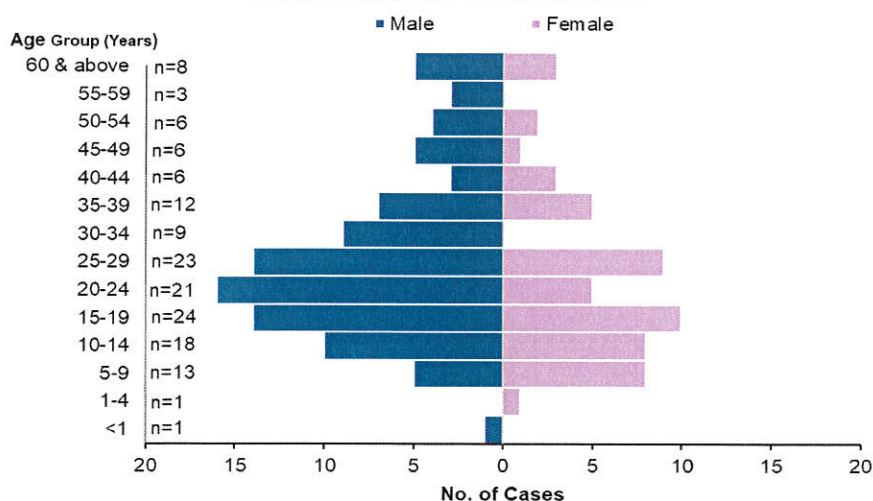
*From the period of January 1 to August 31, 2019

**From the period of January 1 to August 31, 2018

Profile of Cases

Majority of the cases were male (97 or 64%). Age of cases ranged from 2 months to 80 years old (median age of 24 years). The most affected age group were 15 to 19 years (24 or 16%) followed by 25 to 29 years (23 or 15%) (Figure 10).

Figure 10. Confirmed Hepatitis A Cases by Age Group and Sex (n=152)
philippines, january 1 to august 31, 2019



Profile of Deaths

Two deaths (CFR=1%) out of the 152 confirmed hepatitis A cases were reported from Region VI (Iloilo) and Region VII (Cebu).



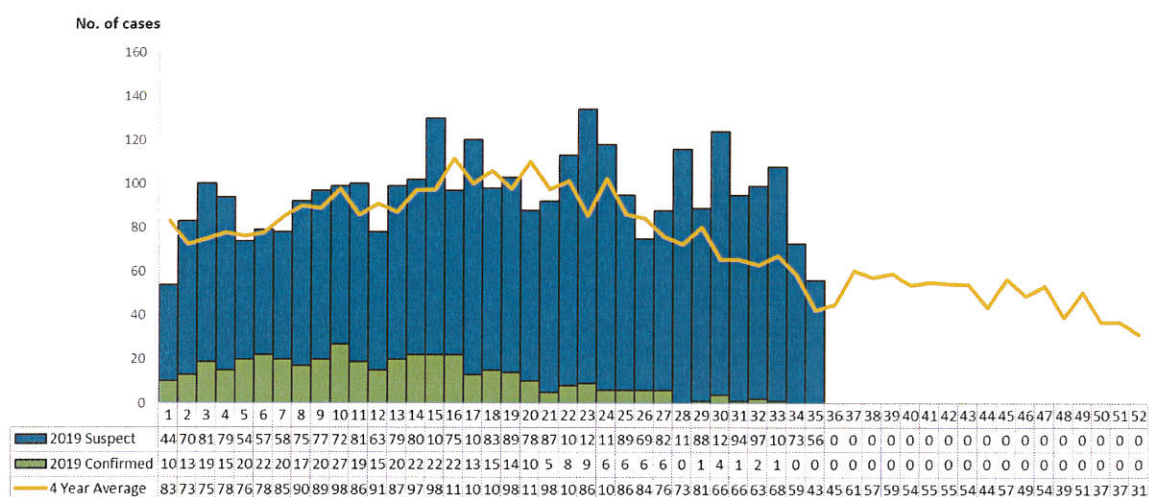
IV. Rotavirus

A. Reported Cases

Trend in the Philippines

A total of 3,340 reported rotavirus cases were reported nationwide from January 1 to August 31, 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=3,340)
Philippines, January 1- August 31, 2019 vs 4 Year Average Data



*same time period

Geographical Distribution

There was a 54% increase of reported Rotavirus cases from 2,163 cases in 2018 to 3,340 cases in 2019. Most of the reported cases were from the following regions: Region VIII (1,118 or 33%), Region V (613 or 18%), Region I (519 or 16%), BARMM (396 or 12%) and Region XII (319 or 10%) (Table 8).

Table 8. Reported Rotavirus Cases & Deaths by Region (N=3,340)
Philippines, 2019* vs 2018**

Region	2019		2018		% Change
	Cases	Deaths	Cases	Deaths	
PHILIPPINES	3,340	32	2,163	18	↑54
I***	519	4	498	5	↑4
II	0	0	0	0	-
III	2	0	4	0	↓50
IV-A	2	0	7	0	↓71
MIMAROPA***	82	0	163	0	↓50
V***	613	2	271	0	↑126
VI***	127	0	252	0	↓50
VII	2	0	1	0	↑100
VIII	1,118	4	0	0	↑
IX	0	0	0	0	-
X	4	0	1	0	↑300
XI	0	0	0	0	-
XII***	319	3	352	3	↓9
BARMM	396	18	413	10	↓4
CAR	0	0	0	0	-
Caraga***	80	0	35	0	↑129
NCR***	76	1	166	0	↓54

*From the period of January 1 – August 31, 2019

**From the period of January 1 – August 31, 2018

***Region with selected rotavirus sentinel sites

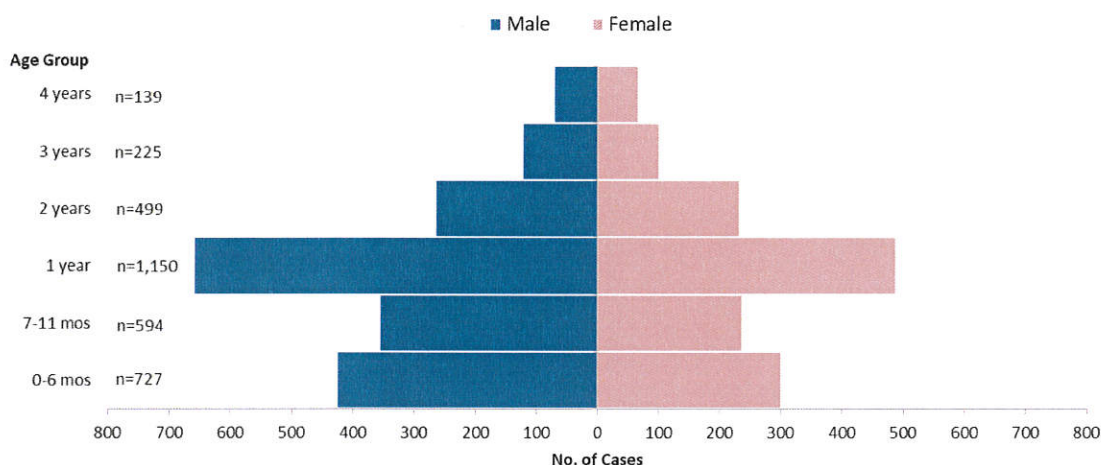


Profile of Cases

Age Group and Sex

Majority of the reported cases were male (1,911 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 (1,150 or 34%) (Figure 12).

Figure 12. Reported Rotavirus Cases by Age Group and Sex (N=3,340)
Philippines, January 1 – August 31, 2019



Note: 6 cases with unspecified age are not reflected in the graph

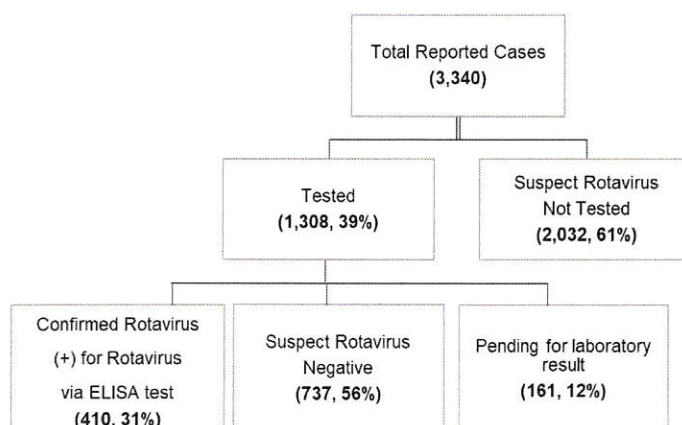
Vaccination Status

Majority of reported rotavirus cases were not vaccinated with rotavirus vaccine (3,305 or 99%). Meanwhile, there were vaccinated cases as follows: 1 dose (10 or 0.3%), 2 doses or more doses (11 or 0.3%) and vaccinated with unknown number of dose (14 or 0.4%).

Laboratory Results

A total of 1,308 (39%) samples were collected for laboratory testing. Of these, 410 (31%) were laboratory confirmed for rotavirus and 737 (56%) were negative (Figure 13).

Figure 13. Reported Rotavirus Cases by Laboratory Status (N=3,340)
Philippines, January 1 – August 31, 2019



Profile of Deaths

Thirty-two deaths (CFR=1%) out of the 3,340 reported rotavirus cases were reported from Regions I (4 cases), V (2 cases), VIII (4 cases), XII (3 cases), BARMM (18 cases) and NCR (1 case). Three (3) confirmed rotavirus deaths were reported from Pangasinan (2 cases) and Maguindanao (1 case).



B. Confirmed Cases

Geographical Distribution

There was a 27% decrease of confirmed Rotavirus cases from 559 cases in 2018 to 410 cases in 2019. Most of the reported cases were from the following regions: Region I (205 or 50%), Region V (62 or 15%) and Region VI (41 or 10%) (Table 9).

Table 9. Confirmed Rotavirus Cases & Deaths by Region (n=410)
Philippines, 2019* vs 2018**

Region	2019		2018		% Change
	Cases	Deaths	Cases	Deaths	
PHILIPPINES	410	3	559	0	↓27
I***	205	2	194	0	↑6
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***	62	0	54	0	↑15
VI***	41	0	91	0	↓55
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***	25	0	73	0	↓66
BARMM	31	1	77	0	↓60
CAR	0	0	0	0	0
Caraga***	29	0	10	0	↑190
NCR***	14	0	51	0	↓73

*From the period of January 1 – August 31, 2019

**From the period of January 1 – August 31, 2018

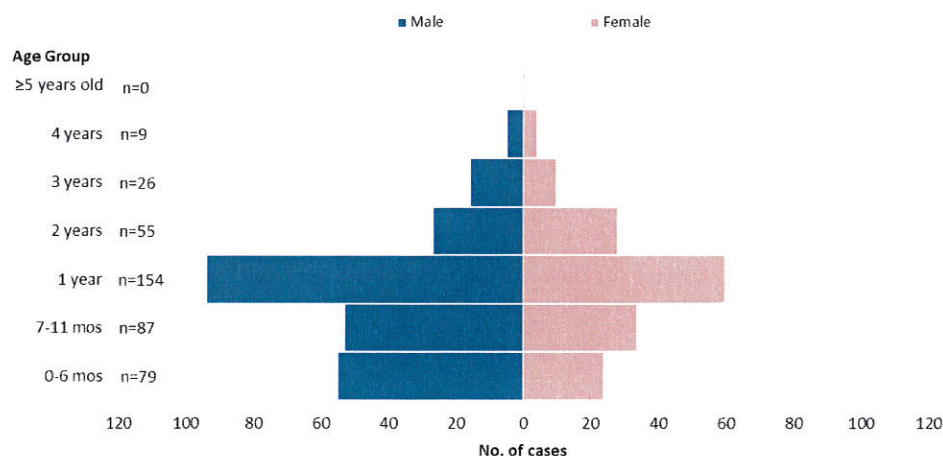
***Region with selected rotavirus sentinel sites

Profile of Cases

Age Group and Sex

Majority of the confirmed cases were male (250 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 (154 or 38%) (Figure 14).

Figure 14. Confirmed Rotavirus Cases by Age group, Sex and Case Classification (n=410)
Philippines, January 1- August 31, 2019





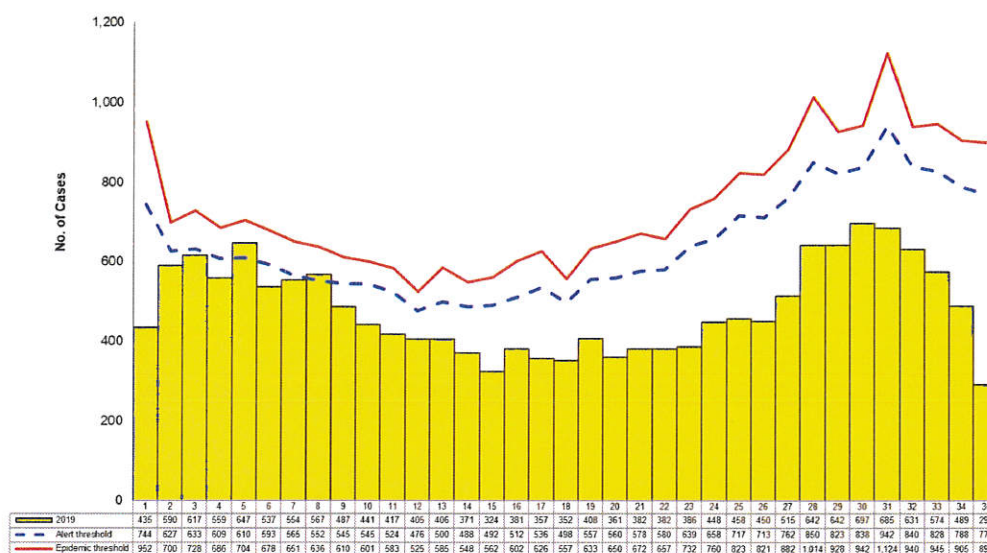
V. Typhoid Fever

A. Reported Cases

Trend in the Philippines

A total of 16,888 reported typhoid fever cases were reported nationwide from January 1 to August 31, 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 (N=16,888)
Morbidity Weeks 1-35 (January 1 - August 31, 2019) vs Epidemic and Alert Thresholds



Geographical Distribution

There was a 10% increase of reported typhoid fever cases from 15,293 cases in 2018 to 16,888 cases in 2019. Most of the reported cases were from the following regions: Region X (2,984 or 18%), CAR (2,344 or 14%), Region VI (1,931 or 11%), Region XII (1,680 or 10%) and BARMM (1,263 or 7%) (Table 10).

Table 10. Reported Typhoid Fever Cases & Deaths by Region (N=16,888)
Philippines, 2019* vs 2018**

Region	2019		2018		% Change
	Cases	Deaths	Cases	Deaths	
PHILIPPINES	16,888	30	15,293	26	↑10
I	906	2	575	0	↑58
II	583	1	371	0	↑57
III	463	0	405	0	↑14
IV-A	1,160	2	1,203	0	↓4
MIMAROPA	230	2	247	0	↓7
V	170	3	242	2	↓30
VI	1,931	3	1,741	4	↑11
VII	1,004	4	901	6	↑11
VIII	304	1	530	2	↓43
IX	1,032	5	875	3	↑18
X	2,984	0	3,214	1	↓7
XI	194	0	138	0	↑41
XII	1,680	1	1,311	2	↑28
BARMM	1,263	6	1,159	1	↑9
CAR	2,344	0	1,408	0	↑66
Caraga	299	0	661	0	↓55
NCR	341	0	312	5	↑9

*From the period of January 1 – August 31, 2019

**From the period of January 1 – August 31, 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.

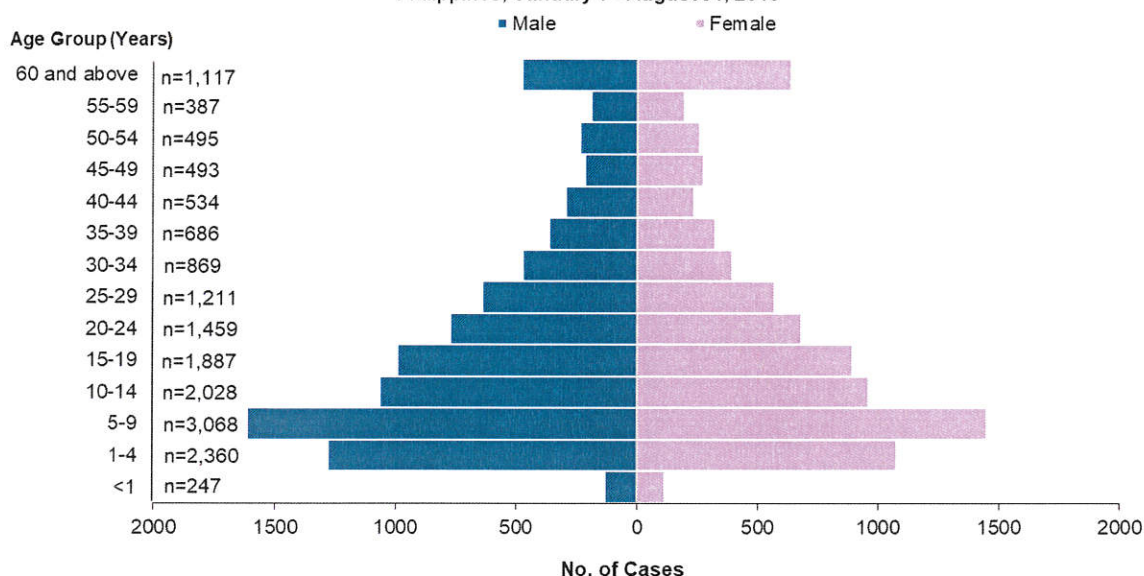
A PDF file of this report is available at www.doh.gov.ph/statistics.



Profile of Cases

Majority of the reported cases were male (8,790 or 52%). Age of cases ranged from less than 1 month to 99 years old (median age of 16 years). The most affected age group was 5 to 9 years old (3,068 or 18%) (Figure 16).

Figure 16. Reported Typhoid Fever Cases by Age Group and Sex (N=16,888)
Philippines, January 1 - August 31, 2019

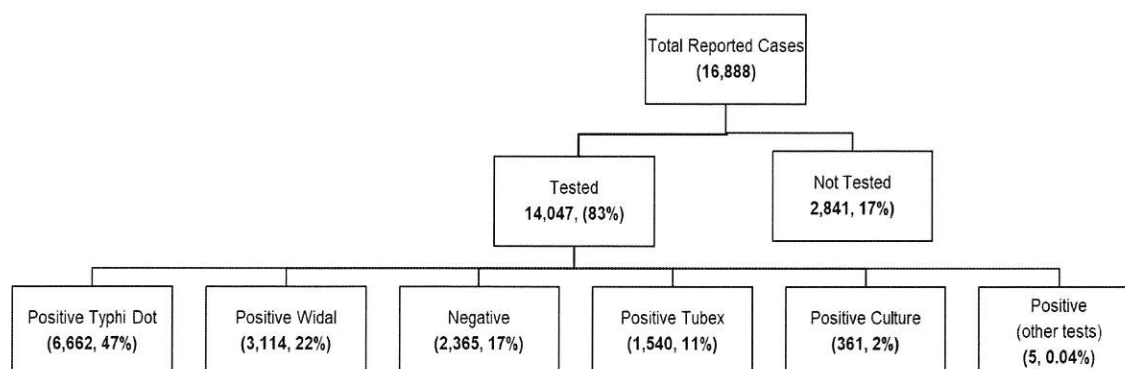


Note: 47 cases with unspecified age are not reflected in the graph

Laboratory Results

A total of 14,047 (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=16,888)
Philippines, January 1 – August 31, 2019



Profile of Deaths

Thirty deaths (CFR=0.2%) out of the 16,888 reported typhoid fever cases. Age range from 7 days to 73 years old (median: 38 years).



B. Confirmed Casesv
Geographical Distribution

There was an 63% increase of confirmed typhoid fever cases from 221 cases in 2018 to 361 cases in 2019. Most of the reported cases were from the following regions: Region IX (72 or 20%), Region VIII (69 or 19%), BARMM (56 or 16%), Region VII (39 or 11%) and Region II (29 or 8%) (Table 11).

Table 11. Confirmed Typhoid Fever Cases & Deaths by Region (n=361)
Philippines, 2019* vs 2018**

Region	2019		2018		% Change
	Cases	Deaths	Cases	Deaths	
PHILIPPINES	361	0	221	3	↑63
I	10	0	6	0	↑67
II	29	0	20	0	↑45
III	1	0	5	0	↓80
IV-A	5	0	5	0	0
MIMAROPA	3	0	6	0	↓50
V	3	0	3	0	0
VI	15	0	7	0	↑114
VII	39	0	39	1	0
VIII	69	0	42	1	↑64
IX	72	0	26	0	↑177
X	5	0	12	0	↓58
XI	6	0	3	0	↑100
XII	24	0	3	0	↑700
BARMM	56	0	13	0	↑331
CAR	6	0	3	0	↑100
Caraga	2	0	6	0	↓67
NCR	16	0	22	1	↓27

*From the period of January 1 – August 31, 2019

**From the period of January 1 – August 31, 2018

Profile of Cases

Age Group and Sex

Majority of the confirmed cases were female (186 or 52%). 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 (70 or 19%) (Figure 18).

Figure 18. Confirmed Typhoid Fever Cases by Age Group and Sex (n=361)
Philippines, January 1 - August 31, 2019

