



**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 June 30, 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	9,435	11	0.12	11,122	↓15
Confirmed Cholera	4	0	0	78	↓95
Confirmed Rotavirus	413	0	0	1,075	↓62
Hepatitis A	123	0	0	287	↓57
Typhoid Fever	9,201	18	0.2	11,522	↓20

**PIDSR Case Definition for Food and Waterborne Diseases**

<b>Acute Bloody Diarrhea (ABD)</b>	
<b>Reported Case</b>	▪ A person with acute diarrhea with visible blood in the stool.
<b>Cholera</b>	
<b>Suspected Case</b>	<ul style="list-style-type: none"> <li>▪ <b>Disease unknown in the area:</b> A person aged 5 years or more with severe dehydration or who died from acute watery diarrhea, <b>OR</b></li> <li>▪ <b>Disease endemic in the area:</b> A person aged 5 years or more with acute watery diarrhea with or without vomiting, <b>OR</b></li> <li>▪ <b>In an area where there is a cholera epidemic:</b> A person with acute watery diarrhea, with or without vomiting.</li> </ul>
<b>Confirmed Case</b>	▪ A suspected case that is laboratory-confirmed. Isolation of <i>Vibrio cholerae</i> 01 or 0139 from stools in any patient with diarrhea.
<b>Rotavirus</b>	
<b>Suspected Case</b>	▪ 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.
<b>Confirmed Case</b>	▪ A suspected case that has been laboratory-confirmed as Rotavirus.
<b>Hepatitis A</b>	
<b>Suspected Case</b>	▪ A person with acute illness characterized by acute jaundice, dark urine, loss of appetite, body weakness, extreme fatigue and right upper quadrant tenderness.
<b>Confirmed Case</b>	▪ A suspected case that is laboratory confirmed (positive for IgM anti-HAV).
<b>Typhoid Fever</b>	
<b>Suspected Case</b>	▪ A person with an illness characterized by insidious onset of sustained fever, headache, malaise, anorexia, relative bradycardia, constipation or diarrhea, and non-productive cough.
<b>Probable Case</b>	▪ A suspected case that is epidemiologically linked to a confirmed case in an outbreak.
<b>Confirmed Case</b>	▪ 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, PHSAE**  
OIC-Director IV, Epidemiology Bureau

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

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

**MARIEL A. DEJESA, MD, MPM**  
Medical Officer IV

**HERDIE L. HIZON**  
Senior Health Program Officer  
Data Integrity Manager

**JEZA JONAH C. ACLAN, RN, MPH**  
Nurse III

**JUNE CANTATA B. CORPUZ, RN**  
Nurse III

**KRIS PAULINE D. MARTINEZ, RN**  
Nurse II



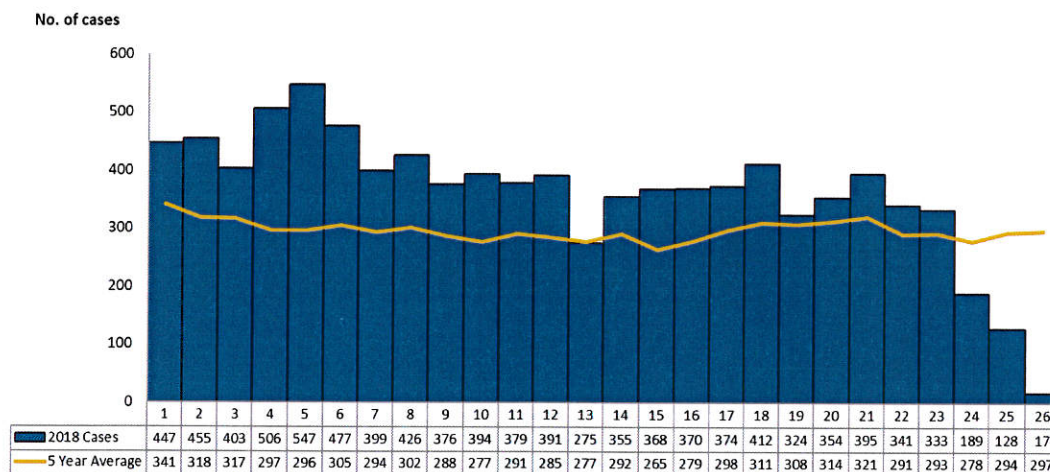


## I. Acute Bloody Diarrhea (ABD)

### Trend in the Philippines

A total of 9,435 acute bloody diarrhea cases were reported nationwide from January 1 to June 30, 2018. The distribution of cases for 2018 compared to the 5-year average of cases from 2013-2017 is shown below (Fig.1).

**Figure 1. Acute Bloody Diarrhea Cases by Morbidity Week (N=9,435)**  
**Philippines, January to June 2018 vs 5 Year Average Data**



\*same time period

### Geographical Distribution

There was a 15% decrease of reported ABD cases from 11,122 cases in 2017 to 9,435 cases in 2018. Most of the reported cases were from the following regions: Region VII (3,354, 36%), Region IX (1,284, 14%), CARAGA (1,215, 13%), CAR (847, 9%), and Region X (832, 9%) (Table 2).

**Table 2. Acute Bloody Diarrhea Cases & Deaths (N=9,435)**  
**Philippines, 2017 vs 2018\***

Region	2017		2018		% Change
	Cases	Deaths	Cases	Deaths	
<b>Philippines</b>	<b>11,122</b>	<b>40</b>	<b>9,435</b>	<b>11</b>	<b>↓ 15</b>
I	64	0	48	0	↓ 25
II	736	0	469	0	↓ 36
III	229	0	320	0	↑ 40
IV-A	381	2	466	0	↑ 22
MIMAROPA	76	0	61	0	↓ 20
V	55	0	17	0	↓ 69
VI	92	0	27	0	↓ 71
VII	3,830	30	3,354	10	↓ 12
VIII	333	1	195	0	↓ 41
IX	807	3	1,284	0	↑ 59
X	733	1	832	0	↑ 14
XI	169	2	78	0	↓ 54
XII	179	0	101	0	↓ 44
ARMM	106	1	91	0	↓ 14
CAR	1,004	0	847	0	↓ 16
CARAGA	2,253	0	1,215	1	↓ 46
NCR	75	0	30	0	↓ 60

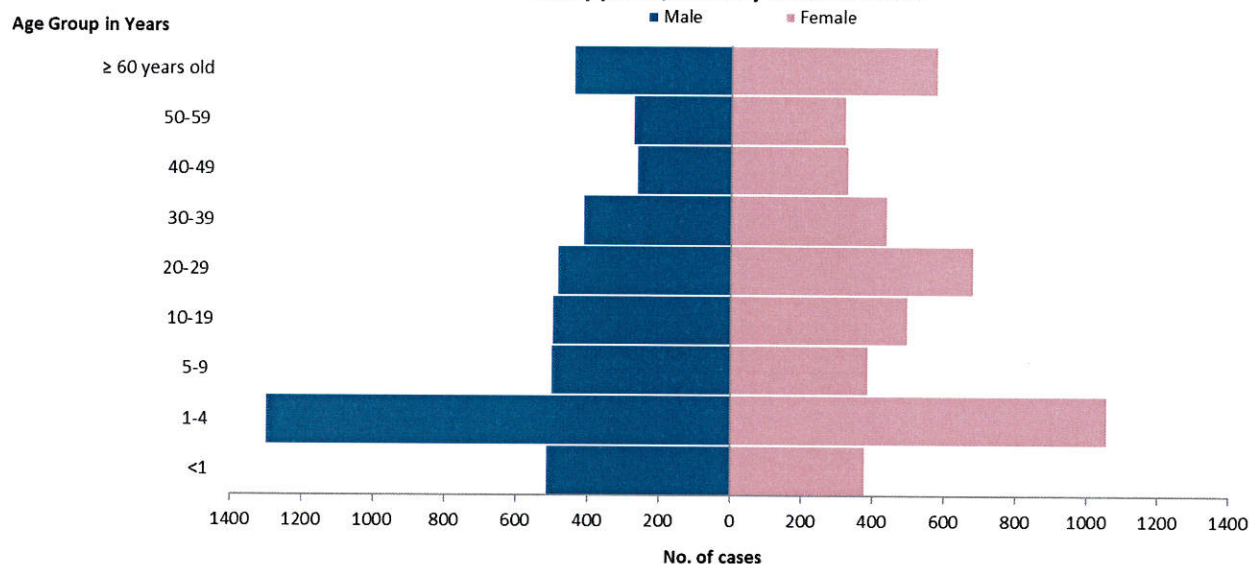
\*From the period of January 1 to June 30, 2018



### Profile of Cases

There was an equal distribution of males and females among reported ABD cases. Age of cases ranged from less than 1 month to 107 years old (median age of 15 years). The most affected age group were from 1 year to 4 years (2,360, 25%) (Fig.2).

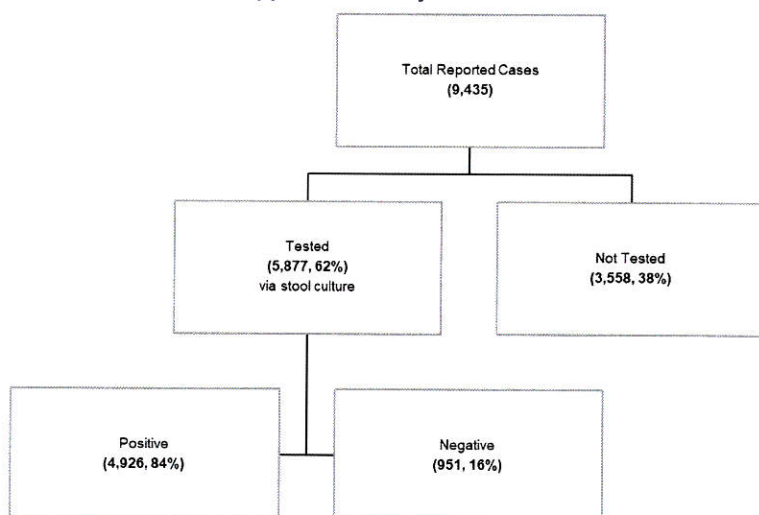
**Figure 2. Acute Bloody Diarrhea Cases by Age Group and Sex (N=9,435)**  
**Philippines, January to June 2018**



### Laboratory Results

A total of 5,877 (62%) samples were collected for laboratory testing (Fig. 3). Of these, 4,926 (84%) were tested for different organisms. The frequently identified organism was *Entamoeba histolytica* (4,205, 85%) (Table 3).

**Figure 3. ABD Cases by Laboratory Status (N=9,435)**  
**Philippines, January to June 2018**



**Table 3. Top 5 Organisms in ABD Cases\***  
**Philippines, January to June 2018**

Organism	Cases
<i>Entamoeba histolytica</i>	4,205
<i>Trophozoites</i>	186
<i>Shigella</i>	177
<i>Escherichia Coli</i>	175
<i>Amoeba</i>	54

\*multiple results and tested via stool culture

### Profile of Deaths

There were eleven (11) deaths (CFR=0.12%) out of the 9,435 reported ABD cases. Age of deaths ranged from 7 months old to 64 years old (median age of 51 years). Age group of these deaths were : less than 1 year (1, 9%), 1 to 4 years (2, 18%), 5 to 9 years (2, 18%), 50 to 59 years (3, 27%) and 60 years and above (3, 27%).



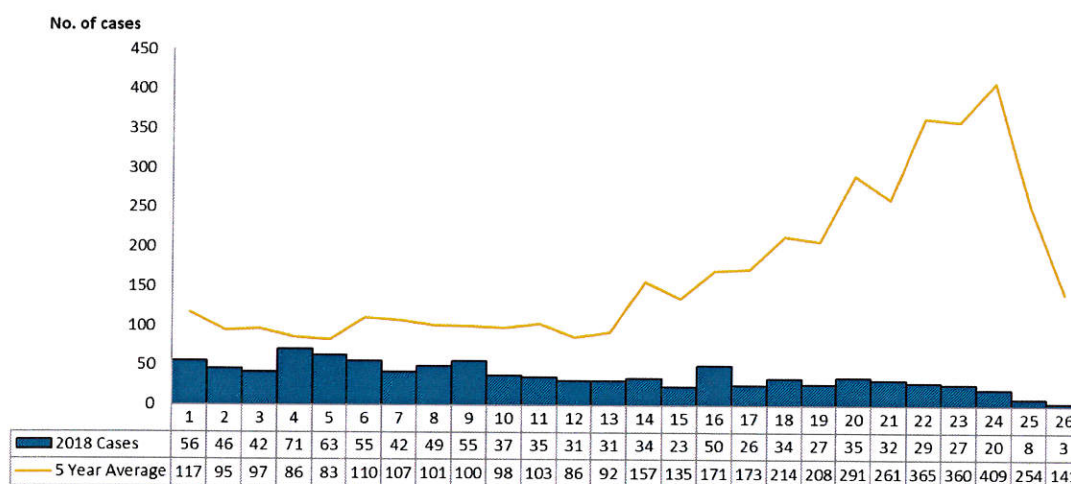


## II. Cholera

### Trend in the Philippines

A total of 961 reported cholera cases were reported nationwide from January 1 to June 30, 2018. The distribution of cases for 2018 compared to the 5-year average of cases from 2013-2017 is shown below (Fig.4).

**Figure 4. Cholera Cases by Morbidity Week (N=961)**  
**Philippines, January to June 2018 vs 5 Year Average Data**



\*same time period

### Geographical Distribution

There was a 62% decrease of reported cholera cases from 2,519 cases in 2017 to 961 cases in 2018. Most of the reported cases were from the following regions: CARAGA (447, 47%), Region V (358, 37%), Region X (131, 14%) and Region XI (15, 2%) (Table 4). There were five deaths (CFR of 0.5%) coming from Region V.

**Table 4. Reported Cholera Cases & Deaths by Region (N=961)**

Region	2017		2018		% Change
	Cases	Deaths	Cases	Deaths	
<b>Philippines</b>	<b>2,519</b>	<b>18</b>	<b>961</b>	<b>5</b>	<b>↓ 62</b>
I	2	0	0	0	↓ 100
II	0	0	0	0	0
III	0	0	0	0	0
IV-A	117	0	3	0	↓ 97
MIMAROPA	7	4	0	0	↓ 100
V	1,070	6	358	5	↓ 67
VI	3	0	1	0	↓ 67
VII	269	2	2	0	↓ 99
VIII	10	1	0	0	↓ 100
IX	3	0	0	0	↓ 100
X	612	5	131	0	↓ 79
XI	4	0	15	0	↑ 275
XII	3	0	0	0	↓ 100
ARMM	4	0	2	0	↓ 50
CAR	0	0	2	0	-
CARAGA	414	0	447	0	↑ 8
NCR	1	0	0	0	↓ 100

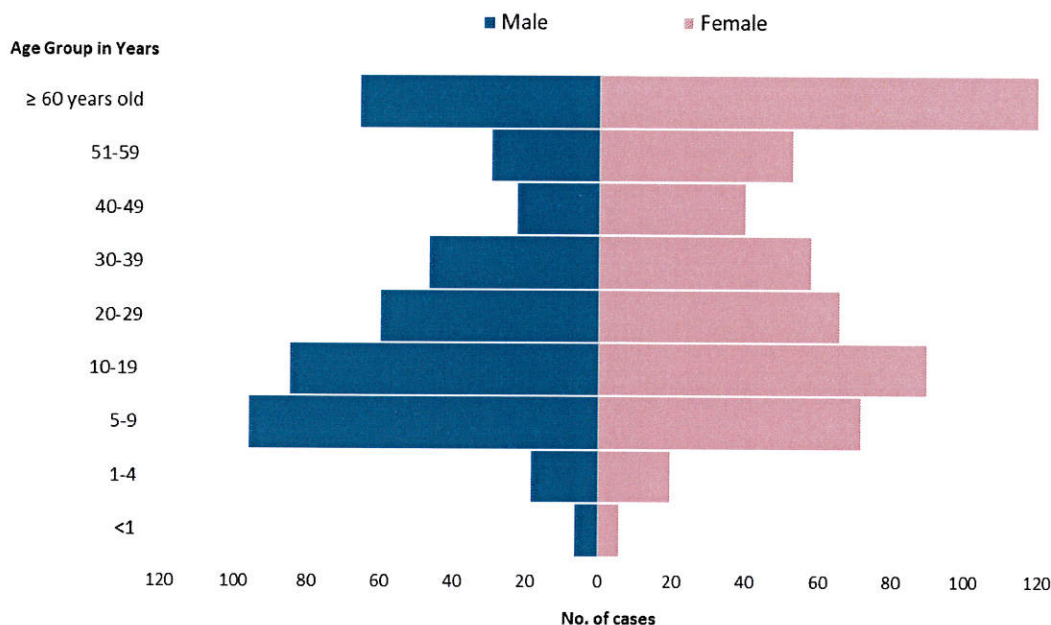
\*From the period of January 1 to June 30, 2018



### Profile of Cases

Majority of the suspect cases were female (527, 55%). Age of suspect cases ranged from 1 month to 105 years old (median age of 25 years). The most affected age group was from 60 years and above (186, 19%) (Fig. 5).

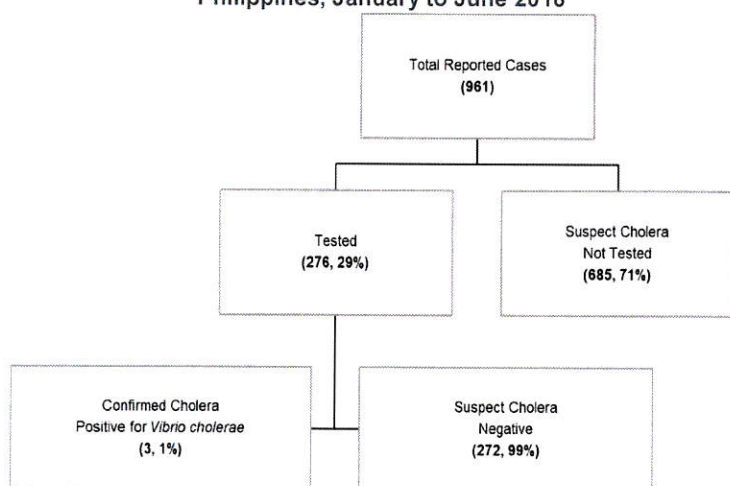
**Figure 5. Reported Cholera Cases by Age Group and Sex (N=961)**  
Philippines, January to June 2018



### Laboratory Results

A total of 276 (29%) specimens were tested (Fig. 6). Of these, 272 (99%) were negative and only 4 (1%) were positive for *Vibrio cholerae* (one *V. cholerae*, one *V. cholera* Ogawa, one *V. cholera* Ogawa Biotype El Tor and one *V. cholera* 0139) (Table 5). Four laboratory confirmed were cases reported one each from regions VI, VII, X and XI (Fig. 6).

**Figure 6. Reported Cholera Cases by Laboratory Status (N=961)**  
Philippines, January to June 2018



**Table 5. Laboratory Status of Cholera cases (N=961)**  
Philippines, January to June 2018

Total Reported Cases	961
Tested	276 (29%)
Positive (stool culture)	4 (1%)
<i>Vibrio cholerae</i>	1
<i>Vibrio cholerae</i> Ogawa	1
<i>Vibrio cholerae</i> 0139	1
<i>Vibrio Cholerae</i> Ogawa Biotype El Tor	1
Negative	272 (99%)
Not Tested	685 (71%)

### Profile of Deaths

There were five deaths (CFR=0.5%) out of the 961 reported cholera cases. Ages of cases who died were: 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.



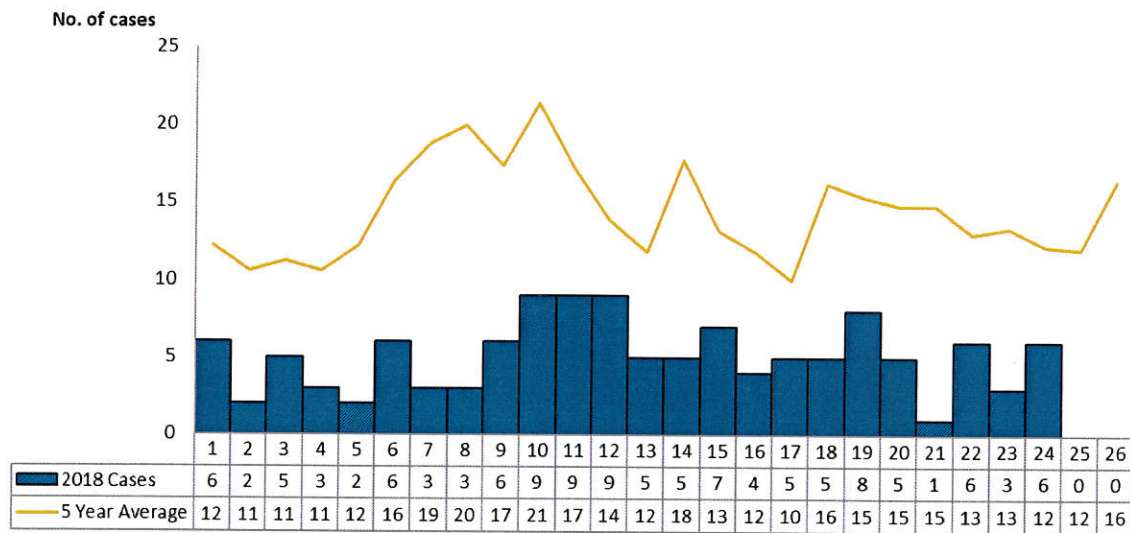


### III. Hepatitis A

#### Trend in the Philippines

A total of 123 Hepatitis A cases were reported nationwide from January 1 to June 30, 2018. The distribution of cases for 2018 compared to the 5-year average of cases from 2013-2017 is shown below (Fig. 7).

**Figure 7. Hepatitis A Cases by Morbidity Week (N=123)**  
**Philippines, January to June 2018 vs 5 Year Average Data**



\*same time period

#### Geographical Distribution

There was a 57% decrease of Hepatitis A cases from 287 cases in 2017 to 123 cases in 2018. Most of the cases were from the following regions: Region VII (50, 41%), Region VI (20, 16%), and NCR (13, 11%) (Table 6). There were no reported deaths among cases.

**Table 6. Hepatitis A Cases & Deaths by Region (N=95)**  
**Philippines, 2017 vs 2018\***

Region	2017		2018		% Change
	Cases	Deaths	Cases	Deaths	
<b>Philippines</b>	<b>287</b>	<b>1</b>	<b>123</b>	<b>0</b>	<b>↓ 57</b>
I	13	0	0	0	↓ 100
II	1	0	7	0	↑ 600
III	12	1	1	0	↓ 92
IV-A	16	0	8	0	↓ 50
MIMAROPA	1	0	0	0	↓ 100
V	11	0	2	0	↓ 82
VI	38	0	20	0	↓ 47
VII	65	0	50	0	↓ 23
VIII	4	0	0	0	↓ 100
IX	18	0	7	0	↓ 61
X	35	0	7	0	↓ 80
XI	3	0	1	0	↓ 67
XII	11	0	0	0	↓ 100
ARMM	12	0	4	0	↓ 67
CAR	7	0	1	0	↓ 86
CARAGA	12	0	2	0	↓ 83
NCR	28	0	13	0	↓ 54

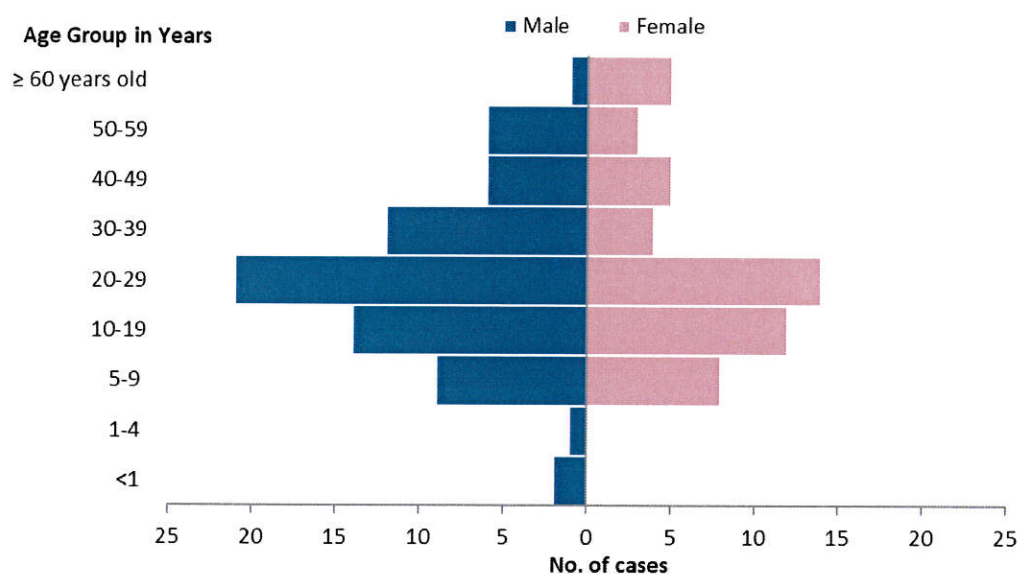
\*From the period of January 1 to June 30, 2018



### Profile of Cases

Majority of the cases were male (72, 59%). Age of cases ranged from 2 months to 82 years old (median age of 24 years). The most affected age group were from 20 to 29 years (35, 28%) (Fig. 9).

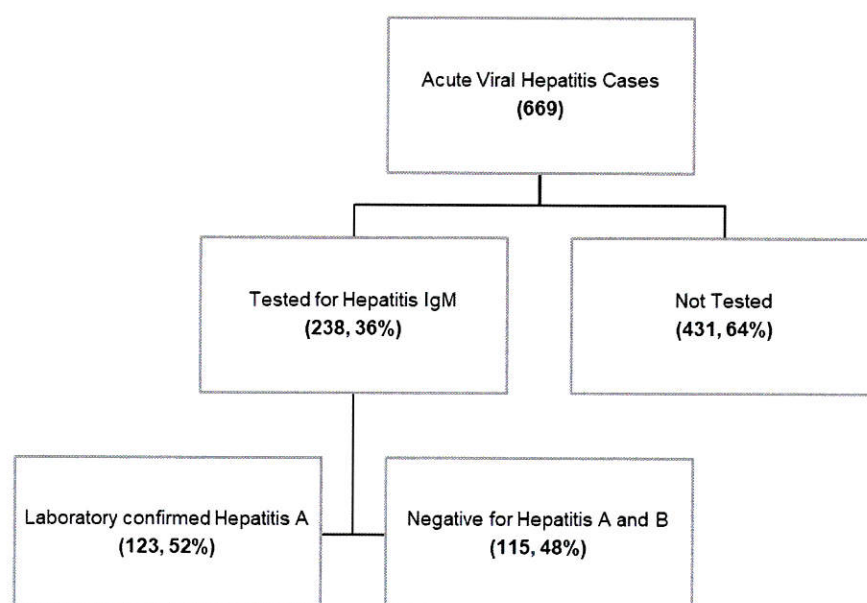
**Figure 8. Hepatitis A Cases by Age Group and Sex (N=123)**  
**Philippines, January to June 2018**



### Laboratory Status

A total of 669 reported cases of Acute Viral Hepatitis in the Philippines from January 1 to June 30, 2018, 238 (36%) were tested for Hepatitis A IgM. Among those tested, 123 (52%) were positive for Hepatitis A (Fig. 9).

**Figure 9. Acute Viral Hepatitis Cases by Case Classification (N=669)**  
**Philippines, January to June 2018**







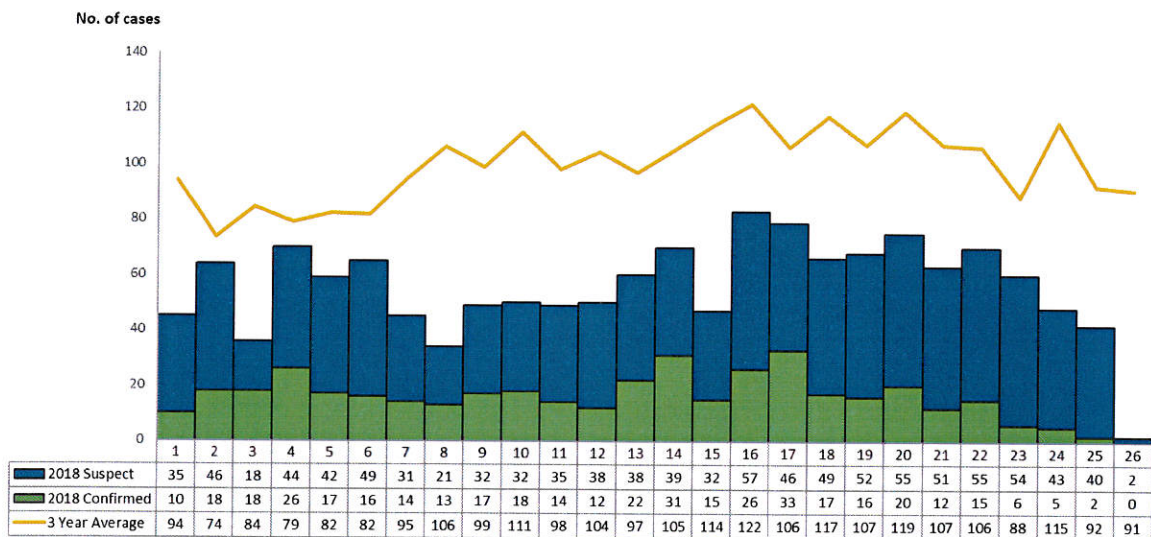
#### IV. Rotavirus

##### A. Reported Cases

##### Trend in the Philippines

A total of 1,449 reported rotavirus cases were reported nationwide from January 1 to June 30, 2018. The distribution of cases for 2018 compared to the 3-year average of cases from 2015-2017 is shown below (Fig. 10).

**Figure 10. Rotavirus Cases by Morbidity Week and Case Classification (N=1,449)**  
**Philippines, January to June 2018 vs 3 Year Average Data**



\*same time period

##### Geographical Distribution

There was a 46% decrease of reported Rotavirus cases from 2,662 cases in 2017 to 1,449 cases in 2018. Most of the reported cases were from the following regions: Region I (364, 25%), Region V (233, 16%), ARMM (221, 15%), Region XII (197, 14%) and Region VI (186, 13%) (Table 7).

**Table 7. Reported Rotavirus Cases & Deaths by Region (N=1,449)**  
**Philippines, 2017 vs 2018\***

Region	2017		2018		% Change
	Cases	Deaths	Cases	Deaths	
<b>Philippines</b>	<b>2,662</b>	<b>25</b>	<b>1,449</b>	<b>7</b>	<b>↓ 46</b>
I	642	14	364	4	↓ 43
II	0	0	1	0	-
III	1	0	3	0	↑ 200
IV-A	10	0	5	0	↓ 50
MIMAROPA	168	1	100	0	↓ 40
V	183	0	233	0	↑ 27
VI	418	4	186	0	↓ 56
VII	2	0	0	0	↓ 100
VIII	0	0	0	0	0
IX	0	0	0	0	0
X	0	0	1	0	-
XI	2	0	0	0	↓ 100
XII	384	2	197	0	↓ 49
ARMM	414	4	221	3	↓ 47
CAR	0	0	0	0	0
CARAGA	236	0	23	0	↓ 90
NCR	202	0	115	0	↓ 43

\*From the period of January 1 to June 30, 2018



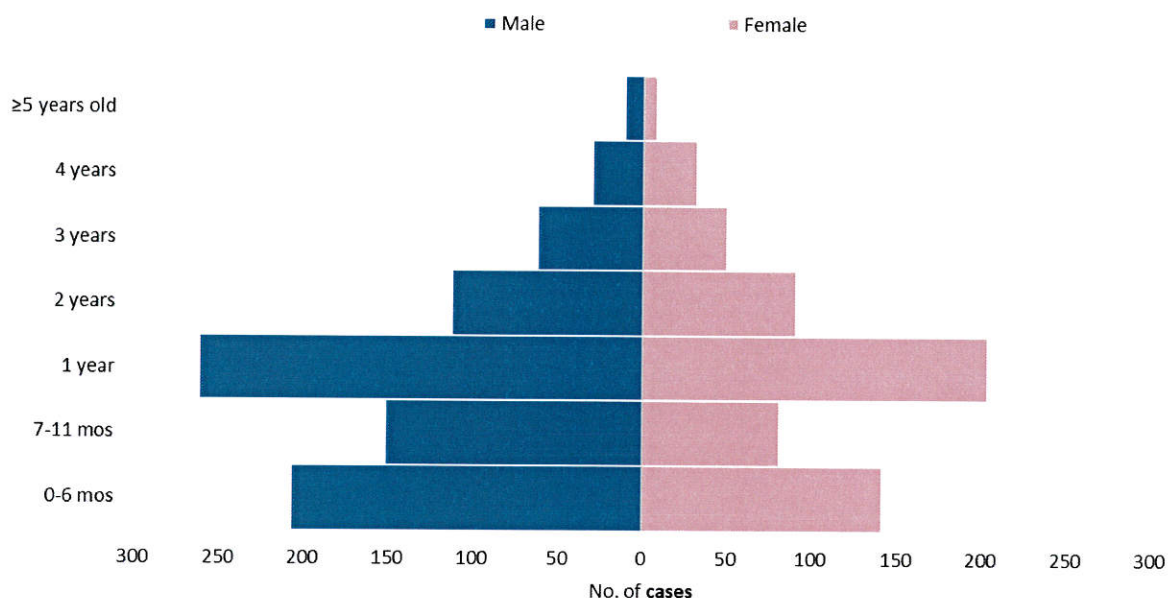


## Profile of Cases

### Age Group and Sex

Majority of the reported cases were male (840, 58%). Age of cases ranged from less than 1 month to 14 years old (median age of 1 year). Most of the cases were 1 year old (466, 32%) (Fig. 11).

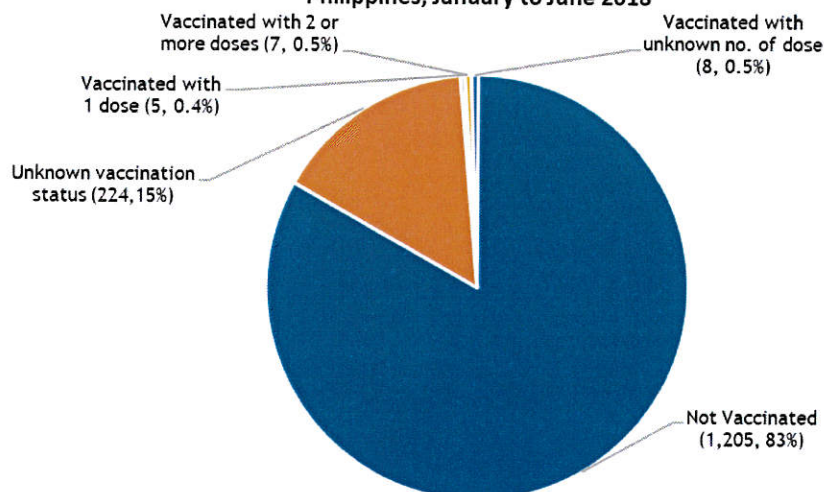
**Figure 11. Reported Rotavirus Cases by Age Group and Sex (N=1,449)**  
**Philippines, January to June 2018**



### Vaccination Status

Majority of the reported cases were not vaccinated with rotavirus (1,205, 83%) (Fig. 12).

**Figure 12. Vaccination Status of Reported Rotavirus Cases (N=1,449)**  
**Philippines, January to June 2018**

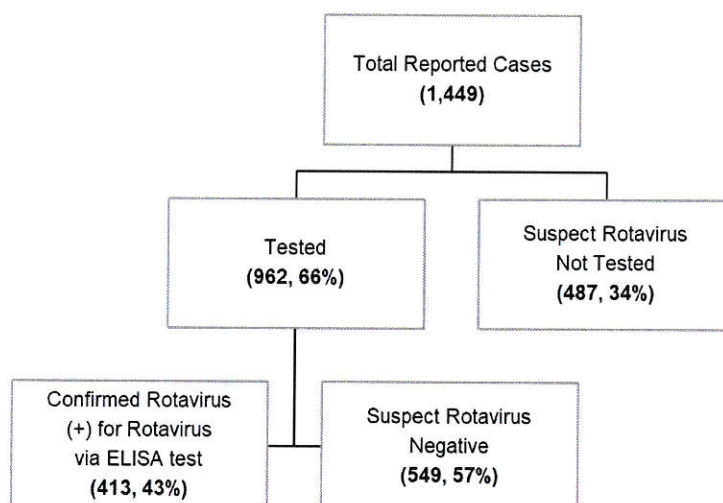




### Laboratory Results

A total of 962 (66%) samples were collected for laboratory testing. Of these, 413 (43%) were laboratory confirmed for rotavirus and 549 (57%) were negative (Fig. 13).

**Figure 13. Reported Rotavirus Cases by Laboratory Status (N=1,449)**  
**Philippines, January to June 2018**



### Profile of Deaths

Seven deaths were reported (CFR=0.48%). Age group of these deaths were : less than 1 month to 6 months (1, 14%), 7 to 11 months (2, 29%), 1 year (2, 29%), 2 years (1, 14%) and 4 years (1, 14%).





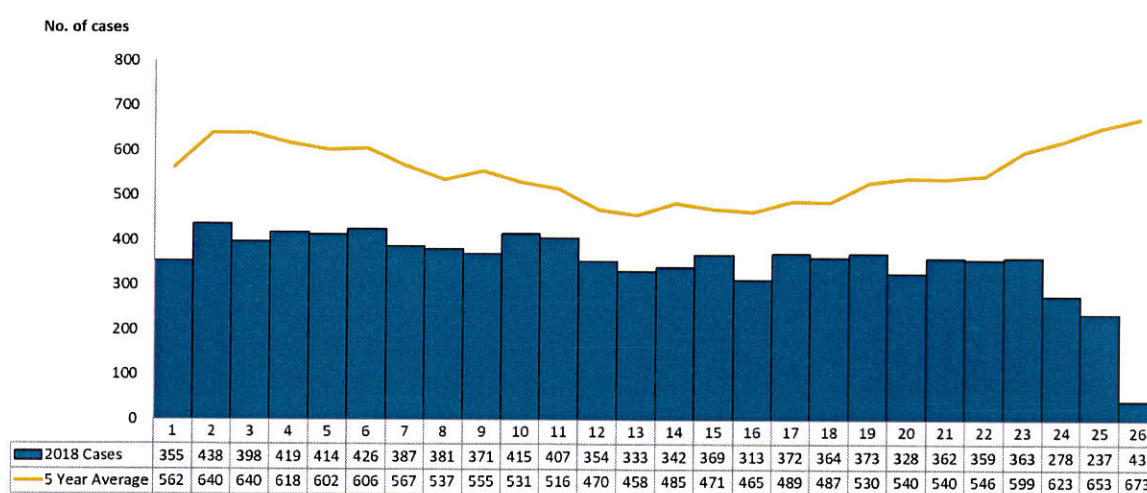
## V. Typhoid Fever

### A. Reported Cases

#### Trend in the Philippines

A total of 9,201 reported typhoid fever cases were reported nationwide from January 1 to June 30, 2018. The distribution of cases for 2018 compared to the 5-year average of cases from 2013-2017 is shown below (Fig.14).

**Figure 14. Reported Typhoid Fever Cases by Morbidity Week (N=9,201)**  
**Philippines, January to June 2018 vs 5 Year Average Data**



\*same time period

#### Geographical Distribution

There was a 20% decrease of reported typhoid fever cases from 11,522 cases in 2017 to 9,201 cases in 2018. Most of the reported cases were from the following regions: Region X (2,093, 23%), Region VI (919, 10%), Region XII (838, 9%), ARMM (772, 8%) and Region IVA (743, 8%) and CAR (665, 7%) (Table 9.)

**Table 9. Reported Typhoid Fever Cases & Deaths by Region (N=9,201)**  
**Philippines, 2017 vs 2018\***

Region	2017		2018		% Change
	Cases	Deaths	Cases	Deaths	
<b>Philippines</b>	<b>11,522</b>	<b>20</b>	<b>9,201</b>	<b>18</b>	<b>↓ 20</b>
I	592	0	280	0	↓ 53
II	378	1	199	0	↓ 47
III	345	0	242	0	↓ 30
IVA	849	0	743	0	↓ 12
MIMAROPA	192	1	121	0	↓ 37
V	230	1	162	2	↓ 30
VI	1,009	4	919	2	↓ 9
VII	632	3	471	4	↓ 25
VIII	284	2	422	1	↑ 49
IX	880	4	573	3	↓ 35
X	2,393	0	2,093	0	↓ 13
XI	111	0	91	0	↓ 18
XII	1,219	0	838	2	↓ 31
ARMM	657	4	772	1	↑ 18
CAR	921	0	665	0	↓ 28
CARAGA	589	0	402	0	↓ 32
NCR	241	0	208	3	↓ 14

\*From the period of January 1 to June 30, 2018

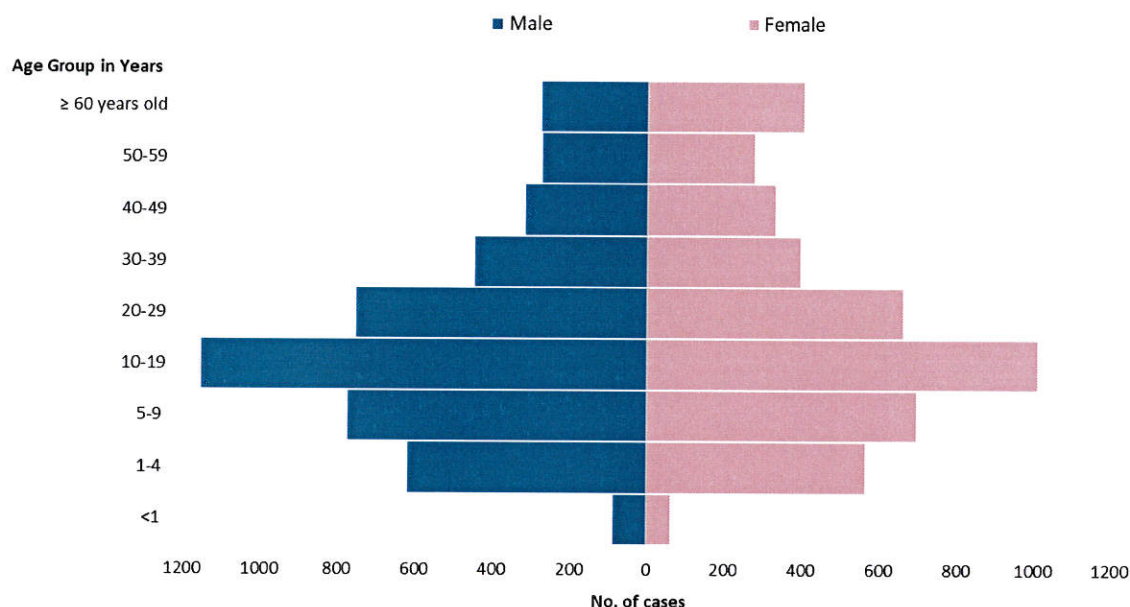
\*Case counts reported here do NOT represent the final number and are subject to change after inclusion of delayed reports and review of cases. All 2017 data reflects partial data only of all regions. A PDF file of this report is available at [www.doh.gov.ph/statistics](http://www.doh.gov.ph/statistics).



### Profile of Cases

Majority of the reported cases were male (4,758, 52%). Age of cases ranged from less than 1 month to 98 years old (median age of 17 years). The most affected age group were from 10 to 19 years old (2,168, 24%) (Fig.15).

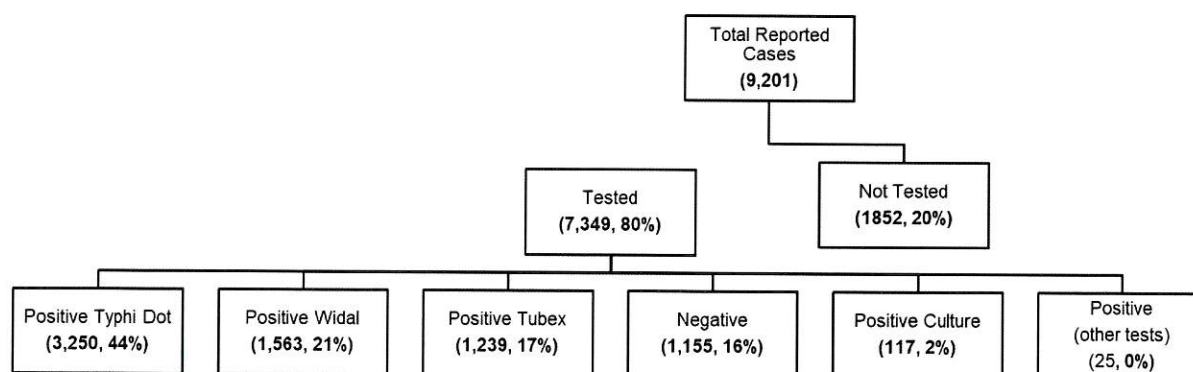
**Figure 15. Reported Typhoid Fever Cases by Age Group and Sex (N=9,201)**  
Philippines, January to June 2018



### Laboratory Results

A total of 7,349 (80%) specimens were referred for testing. Laboratory status of reported typhoid fever cases is shown below (Fig. 17).

**Figure 17. Reported Typhoid Fever Cases by Laboratory Status (N=9,201)**  
Philippines, January to June 2018



### Profile of Deaths

There were 18 deaths (CFR=0.20%) out of the 9,201 reported typhoid fever cases. Age of deaths ranged from 2 to 83 years old (median age of 28 years). Age group of these deaths were: 1 to 4 years (1, 6%), 5 to 9 years (1, 6%), 10 to 19 years (5, 28%), 20 to 29 years (2, 11%), 30 to 39 (3, 17%), 50 to 59 years (2, 11%) and 60 years and above (4, 22%).