



**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 April 28, 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	5,728	8	0.14	6,987	↓ -18
Confirmed Cholera	3	0	0.00	16	↓ -81
Confirmed Rotavirus	263	0	0.00	830	↓ -68
Hepatitis A	76	0	0.00	183	↓ -58
Typhoid Fever	5,455	10	0.18	7,331	↓ -26

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

Acute Bloody Diarrhea (ABD)	
<b>Reported Case</b>	<ul style="list-style-type: none"> <li>A person with acute diarrhea with visible blood in the stool.</li> </ul>
Cholera	
<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>	<ul style="list-style-type: none"> <li>A suspected case that is laboratory-confirmed. Isolation of <i>Vibrio cholerae</i> 01 or 0139 from stools in any patient with diarrhea.</li> </ul>
Rotavirus	
<b>Suspected Case</b>	<ul style="list-style-type: none"> <li>A child &lt;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 &lt; 14 days) in a participating hospital.</li> </ul>
<b>Confirmed Case</b>	<ul style="list-style-type: none"> <li>A suspected case that has been laboratory-confirmed as Rotavirus.</li> </ul>
Hepatitis A	
<b>Suspected Case</b>	<ul style="list-style-type: none"> <li>A person with acute illness characterized by acute jaundice, dark urine, loss of appetite, body weakness, extreme fatigue and right upper quadrant tenderness.</li> </ul>
<b>Confirmed Case</b>	<ul style="list-style-type: none"> <li>A suspected case that is laboratory confirmed (positive for IgM anti-HAV).</li> </ul>
Typhoid Fever	
<b>Suspected Case</b>	<ul style="list-style-type: none"> <li>A person with an illness characterized by insidious onset of sustained fever, headache, malaise, anorexia, relative bradycardia, constipation or diarrhea, and non-productive cough.</li> </ul>
<b>Probable Case</b>	<ul style="list-style-type: none"> <li>A suspected case that is epidemiologically linked to a confirmed case in an outbreak.</li> </ul>
<b>Confirmed Case</b>	<ul style="list-style-type: none"> <li>A suspected or probable case that is laboratory confirmed. (Isolation of <i>Salmonella enterica</i> from blood, stool, or other clinical specimen)</li> </ul>

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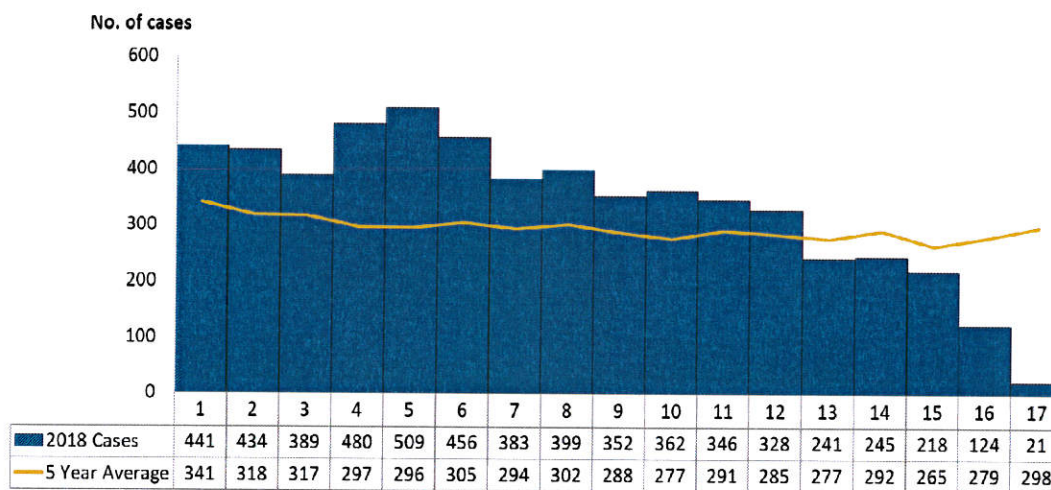


## I. Acute Bloody Diarrhea (ABD)

### Trend in the Philippines

A total of 5,728 acute bloody diarrhea cases were reported nationwide from January 1 to April 28, 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=5,728)**  
**Philippines, January to April 2018 vs 5 Year Average Data**



\*same time period

### Geographical Distribution

There was an 18% decrease of reported ABD cases from 6,987 cases in 2017 to 5,728 cases in 2018. Most of the reported cases were from the following regions: Region VII (2,226, 39%), Region IX (900, 16%), CARAGA (599, 10%), Region X (579, 10%), and CAR (443, 8%) (Table 2).

**Table 2. Acute Bloody Diarrhea Cases & Deaths**  
**Philippines, 2017 vs 2018\***

Region	2017		2018*		% Change
	Cases	Deaths	Cases	Deaths	
<b>Philippines</b>	<b>6,987</b>	<b>32</b>	<b>5,728</b>	<b>8</b>	<b>↓-18</b>
I	39	0	13	0	↓-67
II	385	0	95	0	↓-75
III	133	0	199	0	↑50
IV-A	175	2	261	0	↑49
MIMAROPA	50	0	32	0	↓-36
V	45	0	14	0	↓-69
VI	33	0	12	0	↓-64
VII	2,673	24	2,226	7	↓-17
VIII	261	1	144	0	↓-45
IX	543	2	900	0	↑66
X	403	1	579	0	↑44
XI	123	2	57	0	↓-54
XII	115	0	72	0	↓-37
ARMM	48	0	62	0	↑29
CAR	606	0	443	0	↓-27
CARAGA	1,305	0	599	1	↓-54
NCR	50	0	20	0	↓-60

\*From the period of January 1 to April 28, 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).



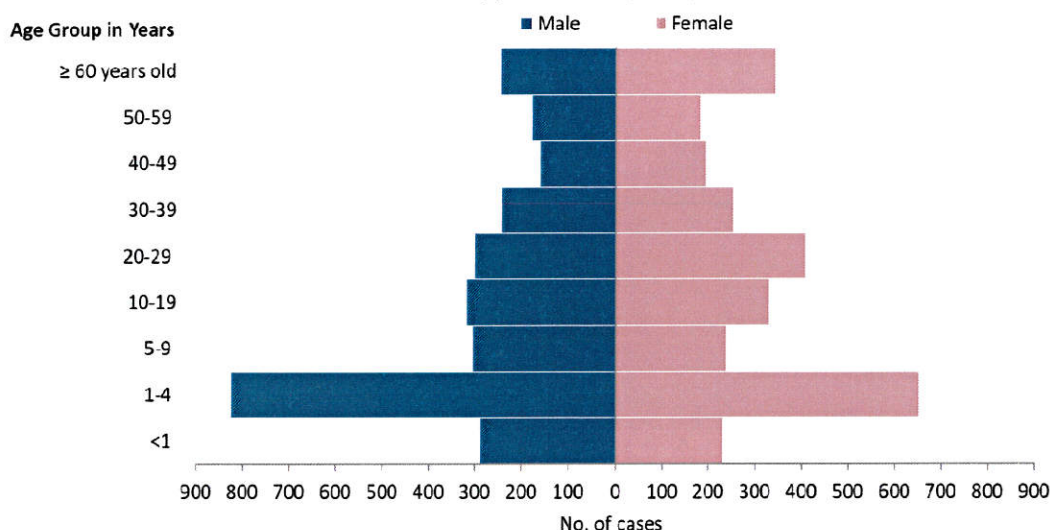


### Profile of Cases

There was an equal distribution of males and females among reported ABD cases. Age of cases ranged from less than 1 month to 94 years old (median age of 14 years). The most affected age group were from 1 year to 4 years (1,480, 26%) (Fig.2).

**Figure 2. Acute Bloody Diarrhea Cases by Age Group and Sex (N=5,728)**

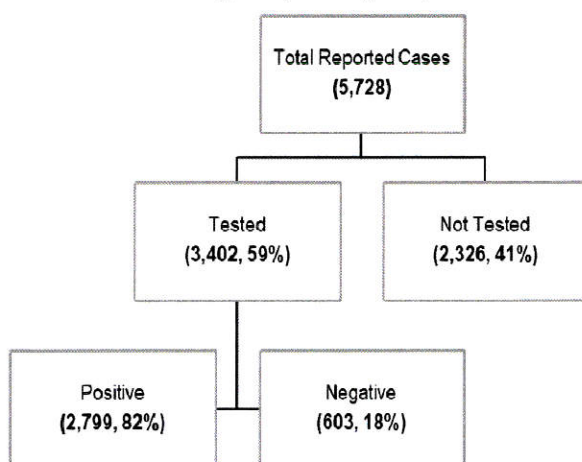
**Philippines, January to April 2018**



### Laboratory Results

A total of 3,402 (59%) samples were collected for laboratory testing (Fig. 3). Of these, 2,799 (82%) were tested positive with different organisms. The frequently identified organism was *Entamoeba histolytica* (2,397, 86%) (Table 3).

**Figure 3. ABD Cases by Laboratory Status (N=5,728)**  
**Philippines, January to April 2018**



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

Organism	Cases
<i>Entamoeba histolytica</i>	2,397
<i>Shigella</i>	121
<i>Trophozoites</i>	110
<i>Escherichia coli</i>	85
<i>Amoeba</i>	25

\*multiple results

### Profile of Deaths

There were eight (8) deaths (CFR=0.14%) out of the 5,728 reported ABD cases. Age of deaths ranged from 1 to 64 years old (median age of 29 years). Age group of these deaths were: 1 to 4 years (2, 25%), 5 to 9 years (2, 25%), 51 to 59 years (2, 25%) and 60 years and above (2, 25%).

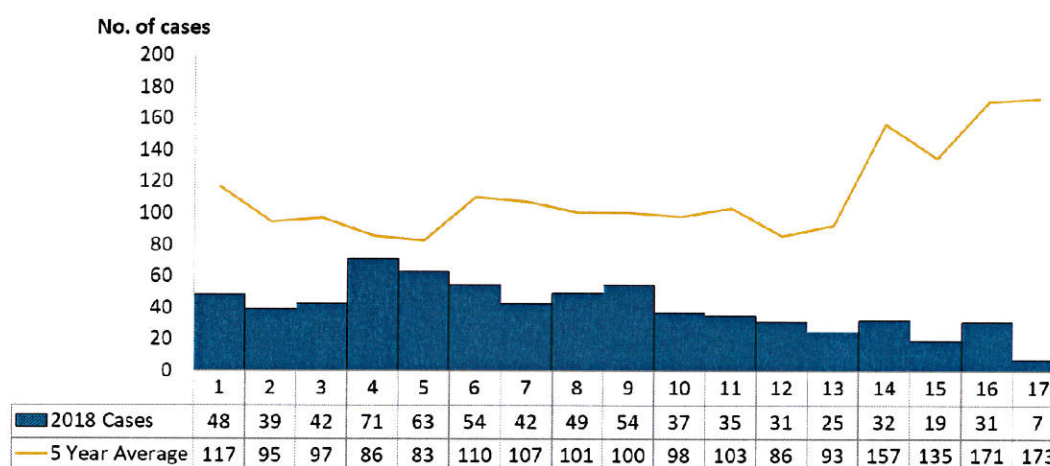


## II. Cholera

### Trend in the Philippines

A total of 679 reported cholera cases were reported nationwide from January 1 to April 28, 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=679)**  
**Philippines, January to April 2018 vs 5 Year Average Data**



\*same time period

### Geographical Distribution

There was a 48% decrease of reported cholera cases from 1,313 cases in 2017 to 679 cases in 2018. Most of the reported cases were from the following regions: CARAGA (317, 47%), Region V (258, 38%), Region X (82, 12%) and Region XI (15, 2%) (Table 4). There were 4 deaths (CFR of 0.6%) reported coming from Region V. There were three laboratory confirmed cholera cases: one confirmed cholera case was reported each from regions of VI, VII and XI (Fig. 6).

**Table 4. Reported Cholera Cases & Deaths by Region**  
**Philippines, 2017 vs 2018\***

Region	2017		2018*		% Change
	Cases	Deaths	Cases	Deaths	
<b>Philippines</b>	<b>1,313</b>	<b>13</b>	<b>679</b>	<b>4</b>	<b>↓-48</b>
I	1	0	0	0	↓-100
II	0	0	0	0	--
III	0	0	0	0	--
IV-A	38	0	3	0	↓-92
<b>MIMAROPA</b>	<b>7</b>	<b>4</b>	<b>0</b>	<b>0</b>	<b>↓-100</b>
V	502	3	258	4	↓-49
VI	1	0	1	0	→ 0
VII	255	1	2	0	↓-99
VIII	10	1	0	0	↓-100
IX	2	0	0	0	↓-100
X	202	4	82	0	↓-59
XI	2	0	15	0	↑ 650
XII	3	0	0	0	↓-100
ARMM	0	0	1	0	--
CAR	0	0	0	0	--
<b>CARAGA</b>	<b>289</b>	<b>0</b>	<b>317</b>	<b>0</b>	<b>↑ 10</b>
<b>NCR</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>↓-100</b>

\*From the period of January 1 to April 28, 2018

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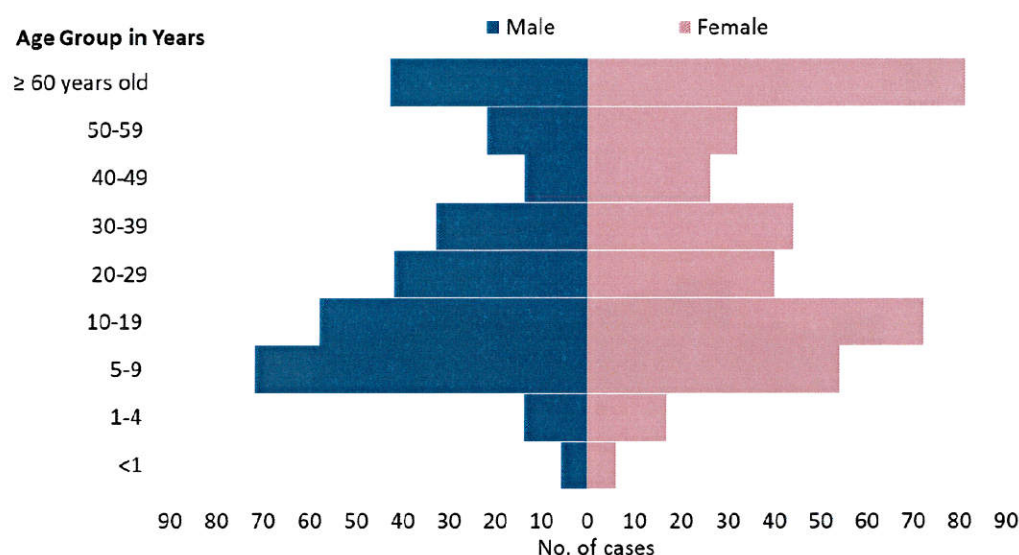




### Profile of Cases

Majority of the suspect cases were female (372, 55%). Age of suspect cases ranged from 1 month to 95 years old (median age of 24 years). The most affected age group was from 5 to 9 years (126, 19%) (Fig. 5).

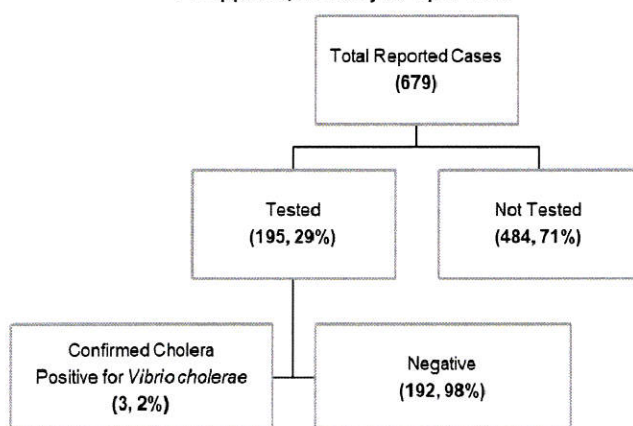
**Figure 5. Reported Cholera Cases by Age Group and Sex (N=679)**  
**Philippines, January to April 2018**



### Laboratory Results

A total of 195 (29%) specimens were tested (Fig. 6). Of these, 192 (98%) were negative and 3 (2%) were laboratory confirmed for *Vibrio cholerae* (one *V. cholerae*, one *V. cholera* Ogawa, one *V. cholera* 0139) (Table 5).

**Figure 6. Reported Cholera Cases by Laboratory Status (N=679)**  
**Philippines, January to April 2018**



**Table 5. Organisms in Cholera cases (n=3)**  
**Philippines, January to April 2018**

Organism	Cases	%
<i>Vibrio Cholerae</i>	1	33
<i>Vibrio Cholerae</i> Ogawa	1	33
<i>Vibrio Cholerae</i> 0139	1	33
<b>Total</b>	<b>3</b>	<b>100</b>

### Profile of Deaths

There were 4 deaths (CFR=0.59%) out of the 679 reported cholera cases. Ages of deaths ranged from 8 to 77 years old (median age of 39 years). Age group of these deaths were: 5 to 9 years (1, 25%), 20 to 29 years (1, 25%), 50 to 59 years (1, 25%) and 60 years & above (1, 25%). There were no reported deaths among confirmed cases.

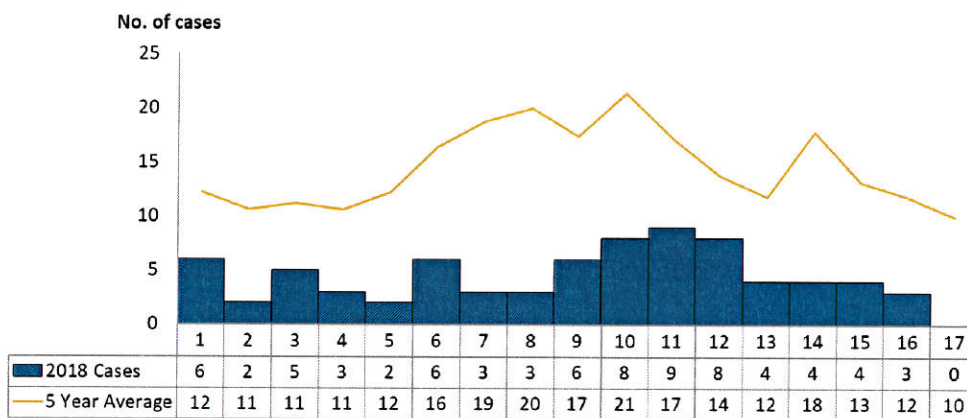


### III. Hepatitis A

#### Trend in the Philippines

A total of 76 Hepatitis A cases were reported nationwide from January 1 to April 28, 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=76)**  
**Philippines, January to April 2018 vs 5 Year Average Data**



\*same time period

#### Geographical Distribution

There was a 58% decrease of Hepatitis A cases from 183 cases in 2017 to 76 cases in 2018. Most of the cases were from the following regions: Region VII (34, 45%), Region VI (8, 11%), and Regions IVA, X and NCR (7, 9%) each (Table 6). There were no reported deaths among cases.

**Table 6. Hepatitis A Cases & Deaths by Region**  
**Philippines, 2017 vs 2018\***

Region	2017		2018*		% Change
	Cases	Deaths	Cases	Deaths	
<b>Philippines</b>	<b>183</b>	<b>0</b>	<b>76</b>	<b>0</b>	<b>↓-58</b>
I	7	0	0	0	↓-100
II	1	0	1	0	→ 0
III	9	0	1	0	↓-89
IV-A	10	0	7	0	↓-30
<b>MIMAROPA</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>--</b>
V	11	0	2	0	↓-82
VI	23	0	8	0	↓-65
VII	34	0	34	0	→ 0
VIII	3	0	0	0	↓-100
IX	9	0	3	0	↓-67
X	26	0	7	0	↓-73
XI	1	0	1	0	→ 0
XII	8	0	0	0	↓-100
<b>ARMM</b>	<b>9</b>	<b>0</b>	<b>4</b>	<b>0</b>	<b>↓-56</b>
<b>CAR</b>	<b>3</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>↓-67</b>
<b>CARAGA</b>	<b>9</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>↓-100</b>
<b>NCR</b>	<b>20</b>	<b>0</b>	<b>7</b>	<b>0</b>	<b>↓-65</b>

\*From the period of January 1 to April 28, 2018

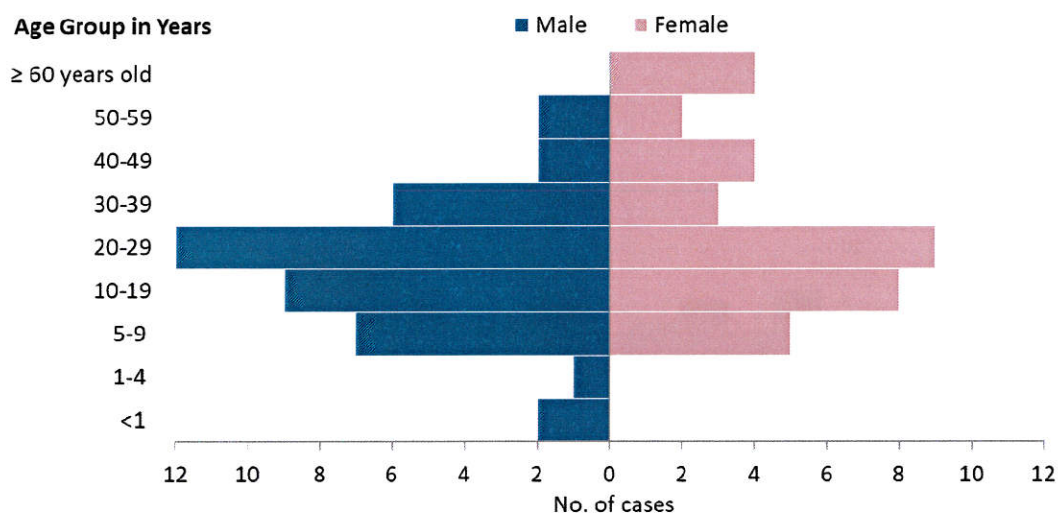
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### Profile of Cases

Majority of the cases were male (41, 54%). Age of cases ranged from 2 months to 82 years old (median age of 23 years). The most affected age group were from 20 to 29 years (21, 28%) (Fig. 9).

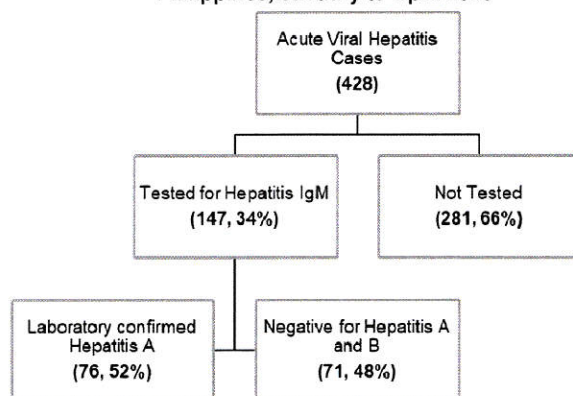
**Figure 8. Hepatitis A Cases by Age Group and Sex (N=76)**  
Philippines, January to April 2018



### Laboratory Status

A total of 428 reported cases of Acute Viral Hepatitis in the Philippines from January 1 to April 28, 2018, 147 (34%) were tested for Hepatitis A IgM. Among those tested, 76 (52%) were positive for Hepatitis A (Fig. 9).

**Figure 9. Reported Hepatitis Cases by Case Classification (N=428)**  
Philippines, January to April 2018







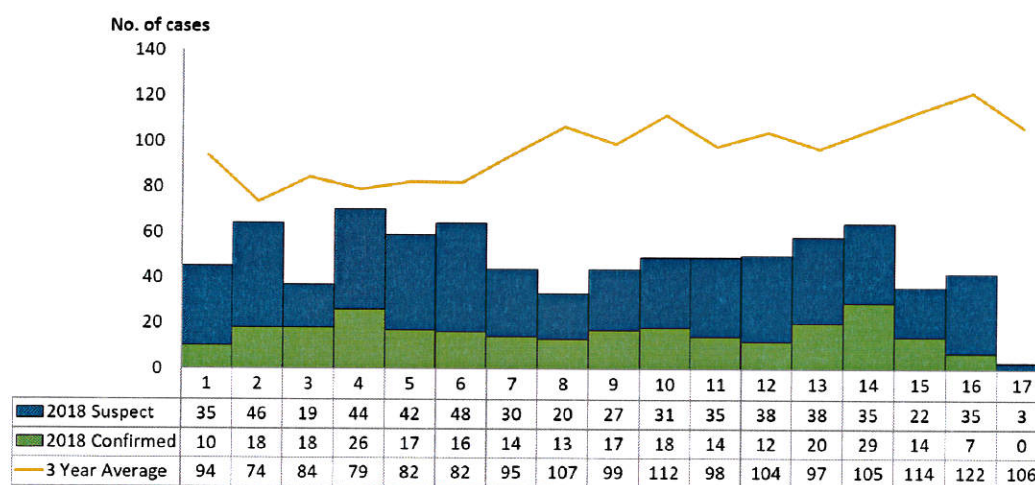
#### IV. Rotavirus

##### A. Reported Cases

##### Trend in the Philippines

A total of 811 reported rotavirus cases were reported nationwide from January 1 to April 28, 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=811)**  
**Philippines, January to April 2018 vs 3 Year Average Data**



\*same time period

##### Geographical Distribution

There was a 54% decrease of reported Rotavirus cases from 1,764 cases in 2017 to 811 cases in 2018. Most of the reported cases were from the following regions: Region I (211, 26%), Region XII (125, 15%), Region V (122, 15%), ARMM (117, 14%) and NCR (88, 11%) (Table 7).

**Table 7. Reported Rotavirus Cases & Deaths by Region**  
**Philippines, 2017 vs 2018\***

Region	2017		2018*		% Change
	Cases	Deaths	Cases	Deaths	
<b>Philippines</b>	<b>1,764</b>	<b>15</b>	<b>811</b>	<b>1</b>	<b>↓-54</b>
I	493	5	211	1	↓-57
II	0	0	1	0	--
III	1	0	2	0	↑100
IV-A	10	0	5	0	↓-50
<b>MIMAROPA</b>	<b>119</b>	<b>1</b>	<b>33</b>	<b>0</b>	<b>↓-72</b>
V	60	0	122	0	↑103
VI	254	3	87	0	↓-66
VII	2	0	0	0	↓-100
VIII	0	0	0	0	--
IX	0	0	0	0	--
X	0	0	1	0	--
XI	0	0	0	0	--
XII	260	2	125	0	↓-52
<b>ARMM</b>	<b>267</b>	<b>4</b>	<b>117</b>	<b>0</b>	<b>↓-56</b>
<b>CAR</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>--</b>
<b>CARAGA</b>	<b>147</b>	<b>0</b>	<b>19</b>	<b>0</b>	<b>↓-87</b>
<b>NCR</b>	<b>151</b>	<b>0</b>	<b>88</b>	<b>0</b>	<b>↓-42</b>

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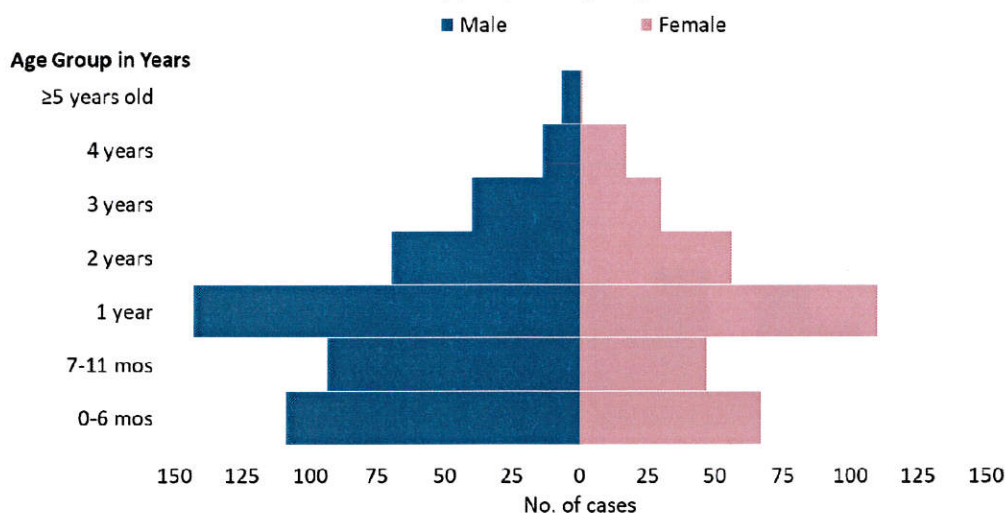


## Profile of Cases

### Age Group and Sex

Majority of the reported cases were male (481, 59%). 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 (253, 31%) (Fig. 11).

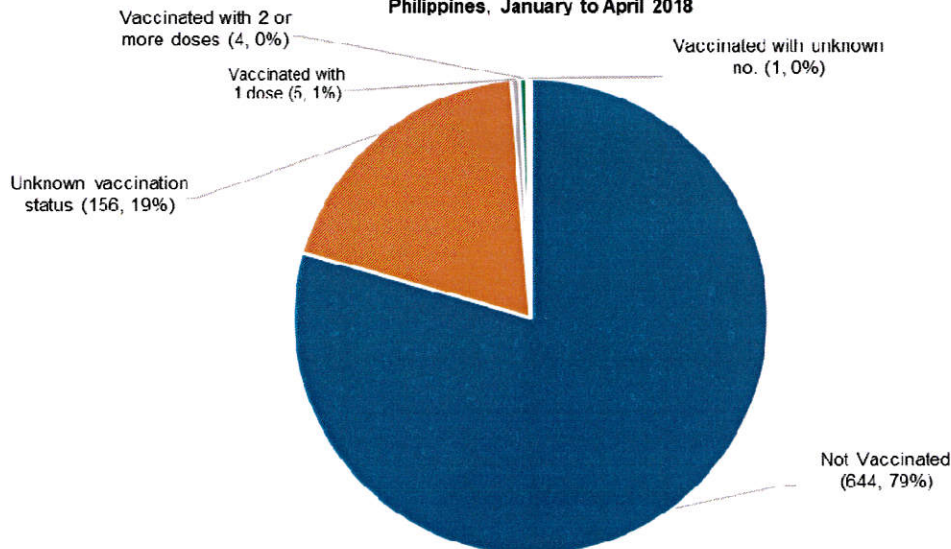
**Figure 11. Reported Rotavirus Cases by Age Group and Sex (N=811)**  
Philippines, January to April 2018



### Vaccination Status

Majority of the reported cases were not vaccinated with rotavirus (644, 79%) (Fig. 12).

**Figure 12. Vaccination Status of Reported Rotavirus Cases (N=811)**  
Philippines, January to April 2018

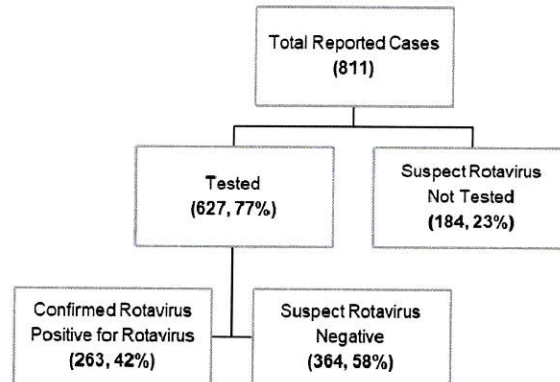




### Laboratory Results

A total of 627 (77%) samples were collected for laboratory testing. Of these, 263 (42%) were laboratory confirmed for *rotavirus* and 364 (58%) were negative (Fig. 13).

**Figure 13. Reported Rotavirus Cases by Laboratory Status (N=811)**  
Philippines, January to April 2018



### Profile of Deaths

One death (CFR=0.12%) was reported out of the 811 reported rotavirus cases. The case was a 2 year old male reported from Region I not vaccinated with Rotavirus.





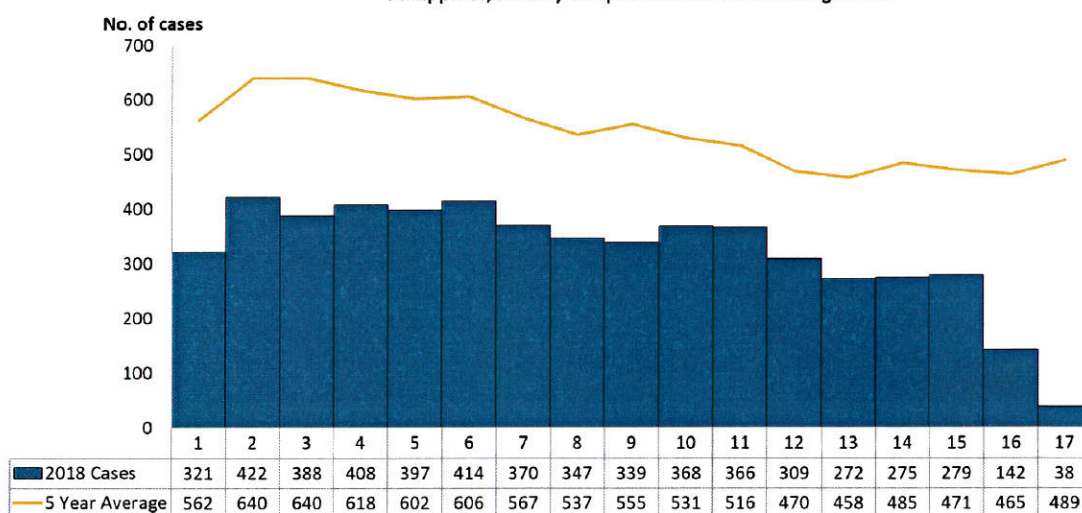
## V. Typhoid Fever

### A. Reported Cases

#### Trend in the Philippines

A total of 5,455 reported typhoid fever cases were reported nationwide from January 1 to April 28, 2018. The distribution of cases for 2018 compared to the 5-year average of cases from 2013-2017 is shown below (Fig.15).

**Figure 15. Reported Typhoid Fever Cases by Morbidity Week (N=5,455)**  
Philippines, January to April 2018 vs 5 Year Average Data



\*same time period

#### Geographical Distribution

There was a 26% decrease of reported typhoid fever cases from 7,331 cases in 2017 to 5,455 cases in 2018. Most of the reported cases were from the following regions: Region X (1,093, 20%), Region IVA (550, 10%), Region VI (530, 10%), Region XII (457, 8%), Region IX and ARMM (397, 7%) (Table 9.)

**Table 9. Reported Typhoid Fever Cases & Deaths by Region**  
Philippines, 2017 vs 2018\*

Region	2017		2018*		% Change
	Cases	Deaths	Cases	Deaths	
<b>Philippines</b>	<b>7,331</b>	<b>7</b>	<b>5,455</b>	<b>10</b>	<b>↓-26</b>
I	364	0	174	0	↓-52
II	216	1	84	0	↓-61
III	202	0	108	0	↓-47
IV-A	533	0	550	0	↑3
MIMAROPA	156	1	63	0	↓-60
V	169	1	108	1	↓-36
VI	639	0	530	2	↓-17
VII	348	2	328	2	↓-6
VIII	141	0	319	1	↑126
IX	550	1	397	0	↓-28
X	1484	0	1,093	0	↓-26
XI	70	0	58	0	↓-17
XII	773	0	457	1	↓-41
ARMM	478	1	397	1	↓-17
CAR	584	0	365	0	↓-38
CARAGA	450	0	286	0	↓-36
NCR	174	0	138	2	↓-21

\*From the period of January 1 to April 28, 2018

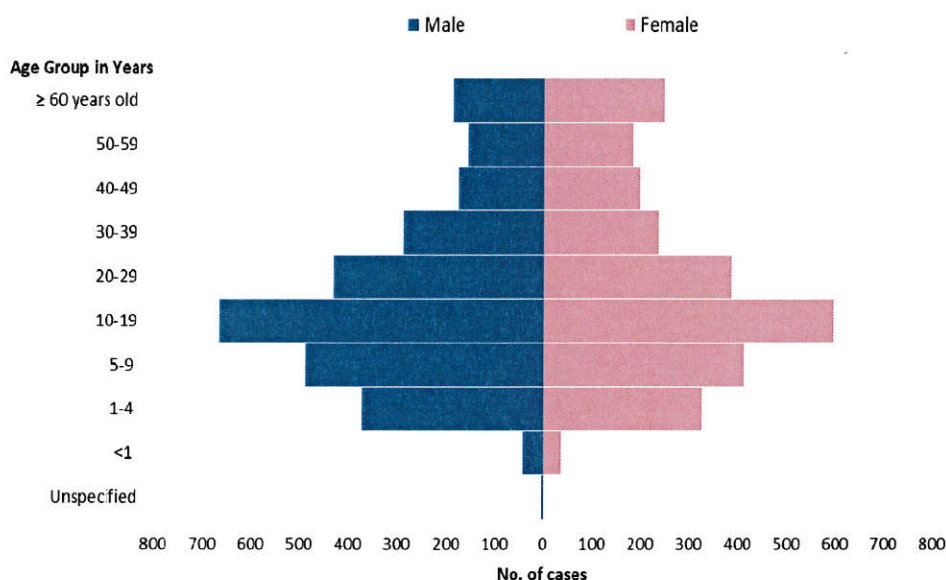
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### Profile of Cases

Majority of the reported cases were male (2,826, 52%). Age of cases ranged from less than 1 month to 97 years old (median age of 17 years). The most affected age group were from 10 to 19 years old (1,263, 23%) (Fig.16).

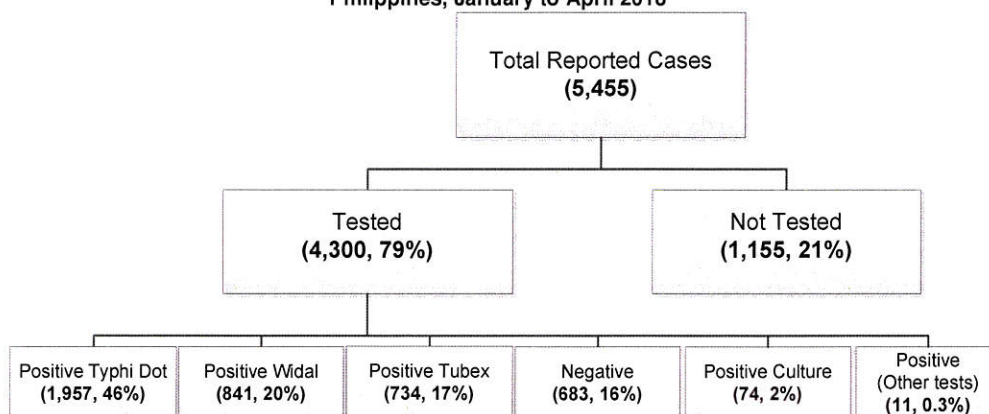
**Figure 16. Reported Typhoid Fever Cases by Age Group and Sex (N=5,455)**  
Philippines, January to April 2018



### Laboratory Results

A total of 4,300 (79%) 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=5,455)**  
Philippines, January to April 2018



### Profile of Deaths

There were ten (10) deaths (CFR=0.18%) out of the 5,455 reported typhoid fever cases. Age of deaths ranged from 2 to 83 years old (median age of 19 years). Age group of these deaths were: 1 to 4 years (1, 10%), 10 to 19 years (4, 40%), 20 to 29 years (2, 20%), 30 to 39 years (1, 10%) and 60 years and above (2, 20%).