



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 October 26, 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	13,758	23	0.17	16,171	↓15
Confirmed Cholera	9	0	0.00	12	↓25
Confirmed Rotavirus	537	4	0.74	669	↓20
Hepatitis A	191	2	1.05	292	↓35
Typhoid Fever	22,263	36	0.16	19,031	↑17

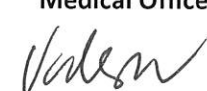
PIDSR Case Definition for Food and Waterborne Diseases


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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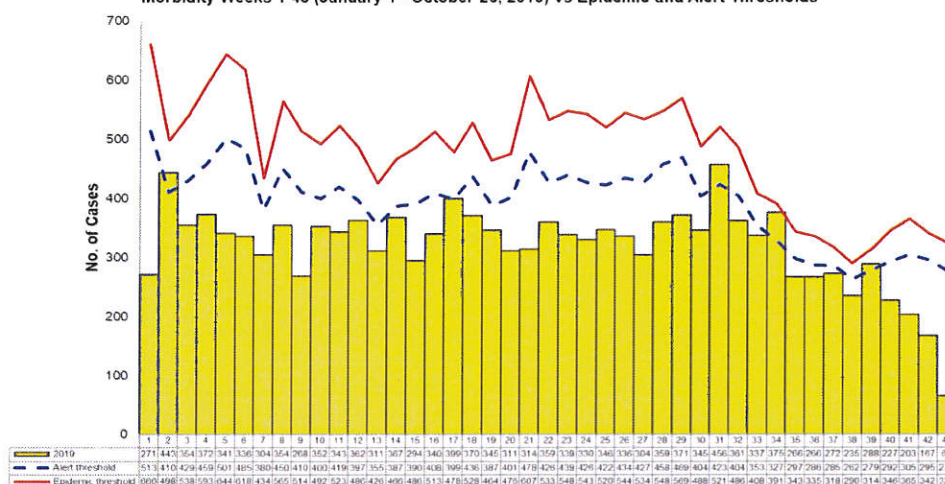


I. Acute Bloody Diarrhea (ABD)

Trend in the Philippines

A total of 13,758 acute bloody diarrhea cases were reported nationwide from January 1 to October 26, 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 (N=13,758)
Morbidity Weeks 1-43 (January 1 - October 26, 2019) vs Epidemic and Alert Thresholds



Geographical Distribution

There was a 15% decrease of reported ABD cases from 16,171 cases in 2018 to 13,758 cases in 2019 for the same period (January 1 – October 26, 2019). Most of the reported cases were from the following regions: Region VII (4,621 or 34%), Region IX (2,049 or 15%) and CARAGA (1,962 or 14%) (Table 2).

Table 2. Acute Bloody Diarrhea Cases and Deaths by Region (N=13,758)
Philippines, January 1 – October 26, 2019 vs 2018 same time period

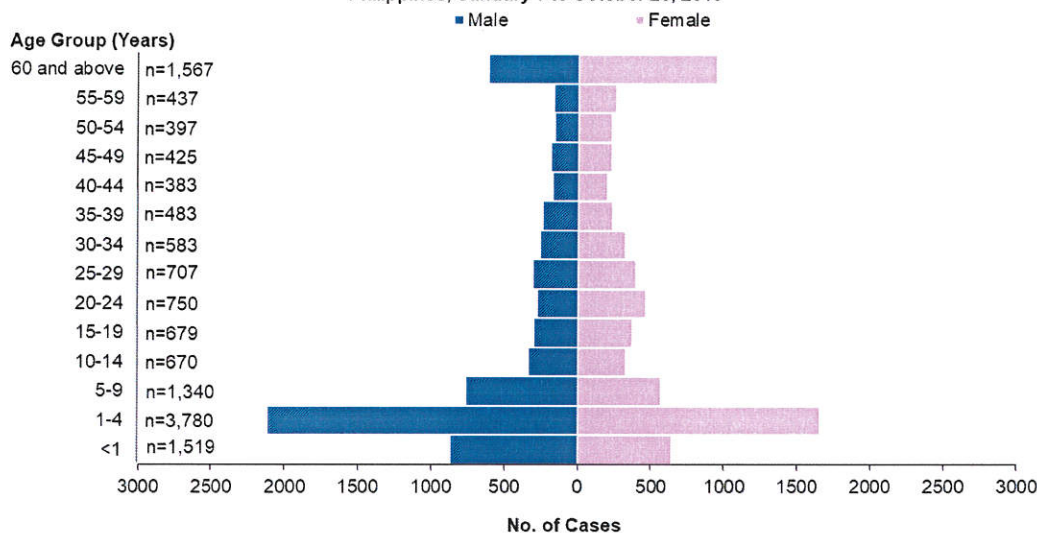
Region	Cases						Deaths			
	Cases reported for October			Cumulative number of cases reported (Jan. 1-Oct. 26)			Number of deaths reported for October		Cumulative number of deaths reported (Jan. 1-Oct. 26)	
	2018	2019	% Change	2018	2019	% Change	2018	2019	2018	2019
PHILIPPINES	1,147	662	↓42	16,171	13,758	↓15	1	2	19	23
I	1	4	↑300	73	49	↓33	0	1	0	3
II	52	25	↓52	739	942	↑27	0	0	0	0
III	36	16	↓56	570	281	↓51	0	0	0	0
IV-A CALABARZON	62	50	↓19	786	576	↓27	0	0	0	0
IV-B MIMAROPA	3	8	↑167	115	69	↓40	0	0	0	0
V	2	7	↑250	26	96	↑269	0	0	0	0
VI	14	0	↓100	61	42	↓31	0	0	0	0
VII	334	225	↓33	5,903	4,621	↓22	0	1	15	16
VIII	15	15	0	301	279	↓7	0	0	0	0
IX	207	97	↓53	2,170	2,049	↓6	0	0	1	2
X	60	39	↓35	1,028	873	↓15	0	0	0	1
XI	10	11	↑10	136	161	↑18	0	0	0	0
XII	11	10	↓9	183	161	↓12	0	0	0	0
BARMM	12	8	↓33	147	236	↑61	0	0	1	0
CAR	149	45	↓70	1,439	1,283	↓11	0	0	0	1
CARAGA	177	96	↓46	2,433	1,962	↓19	1	0	2	0
NCR	2	6	↑200	61	78	↑28	0	0	0	0



Profile of Cases

Almost equal distribution of reported ABD cases in males (6,864 or 50%) and females (6,894 or 50%) was noted. Age of cases ranged from less than 1 month to 102 years old (median age of 11 years). The most affected age group was 1 to 4 years old (3,780 or 27%) (Figure 2).

Figure 2. Acute Bloody Diarrhea Cases by Age Group and Sex (N=13,758)
Philippines, January 1 to October 26, 2019



Laboratory Results

A total of 9,011 (65%) samples were collected for laboratory testing (Figure 3). Of these, 7,863 (87%) yielded positive for different organisms. The frequently identified organism was *Entamoeba histolytica* (6,951 or 88%) (Table 3).

Figure 3. ABD Cases by Laboratory Result (N=13,758)
Philippines, January 1 – October 26, 2019

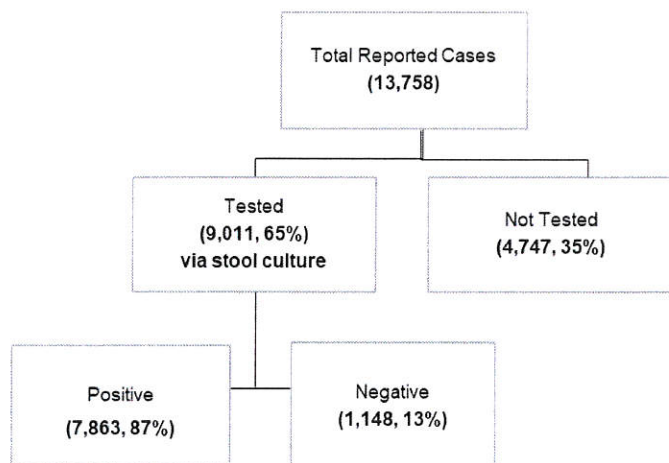


Table 3. Top 3 Organisms in ABD Cases
Philippines, January 1 – October 26, 2019

Organism	Cases
<i>Entamoeba histolytica</i>	6,951
<i>Shigella</i>	358
<i>Escherichia Coli</i>	227

Profile of Deaths

There were 23 deaths (CFR=0.2%) out of the 13,758 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: 21 years).

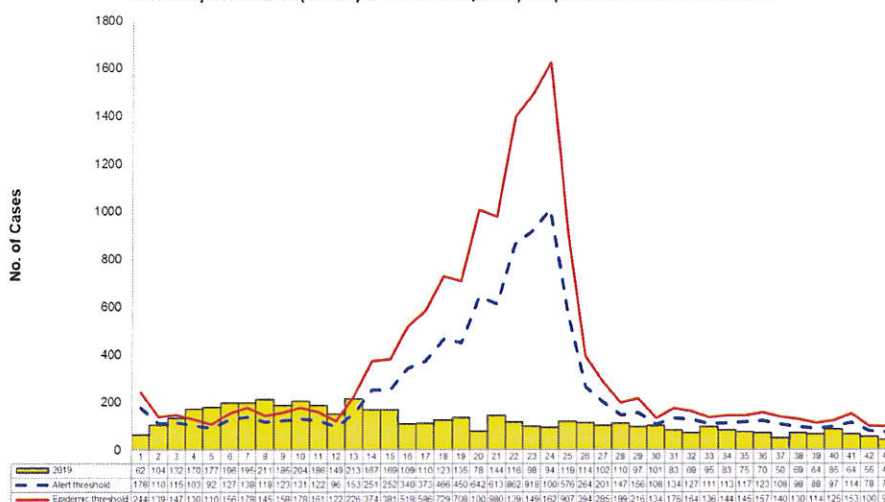


II. Cholera

Trend in the Philippines

A total of 5,073 reported cholera cases were reported nationwide from January 1 to October 26, 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=5,073)
Morbidity Weeks 1-43 (January 1 - October 26, 2019) vs Epidemic and Alert Thresholds



Geographical Distribution

There was a 175% increase of reported cholera cases from 1,845 cases in 2018 to 5,073 cases in 2019. Regions VIII (3,229 or 64%) reported the highest number of cholera cases from January 1 – October 26, 2019 (Table 4).

Table 4. Reported Cholera Cases & Deaths by Region (N=5,073)
Philippines, January 1 – October 26, 2019 vs 2018 same time period

Region	Cases						Deaths			
	Cases reported for October			Cumulative number of cases reported (Jan. 1-Oct. 26)			Number of deaths reported for October		Cumulative number of deaths reported (Jan. 1-Oct. 26)	
	2018	2019	% Change	2018	2019	% Change	2018	2019	2018	2019
PHILIPPINES	193	245	↑27	1,845	5,073	↑175	0	0	6	8
I	0	0	-	0	1	↑	0	0	0	0
II	0	0	-	0	0	-	0	0	0	0
III	0	0	-	0	0	-	0	0	0	0
IV-A CALABARZON	0	0	-	11	1	↓91	0	0	1	0
IV-B MIMAROPA	0	0	-	6	2	↓67	0	0	0	0
V	68	20	↓71	641	411	↓36	0	0	5	2
VI	0	0	-	1	0	↓100	0	0	0	0
VII	0	0	-	2	1	↓50	0	0	0	0
VIII	0	141	↑	1	3,229	↑322,800	0	0	0	6
IX	1	0	↓100	1	7	↑600	0	0	0	0
X	4	0	↓100	153	40	↓74	0	0	0	0
XI	0	0	-	15	1	↓93	0	0	0	0
XII	0	0	-	3	0	↓100	0	0	0	0
BARMM	0	1	↑	3	3	0	0	0	0	0
CAR	0	0	-	3	0	↓100	0	0	0	0
CARAGA	120	83	↓31	1,005	1,373	↑37	0	0	0	0
NCR	0	0	-	0	4	↑	0	0	0	0

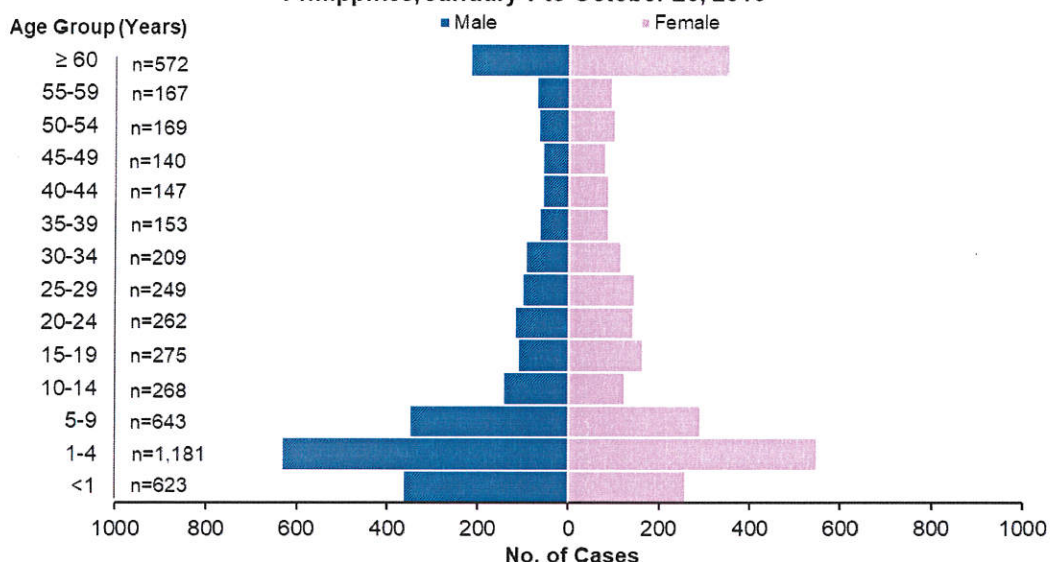
*Cases reported in 2018 EXCLUDES acute watery diarrhea that fits cholera case definition while cases in 2019 INCLUDES acute watery diarrhea cases.



Profile of Cases

Majority of the reported cases were female (2,595 or 51%). Age of suspect cases ranged from less than 1 month to 102 years old (median age of 11 years). The most affected age groups were 1 to 4 years (1,181 or 23%) followed by 5 to 9 years (643 or 13%) (Figure 5).

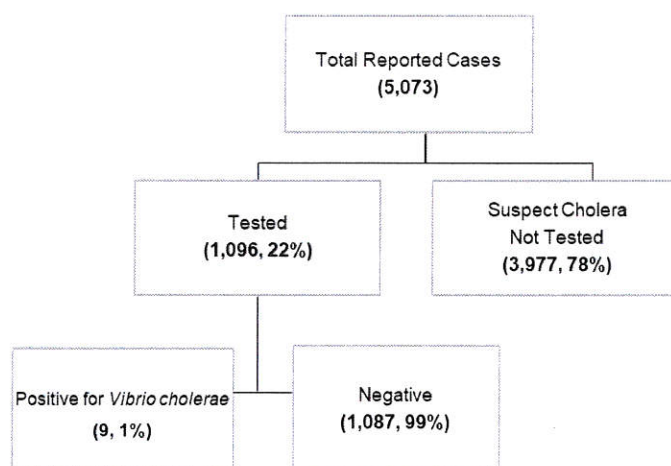
Figure 5. Reported Cholera Cases by Age Group and Sex (N=5,073)
Philippines, January 1 to October 26, 2019



Laboratory Results

A total of 1,096 (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=5,073)
Philippines, January 1 – October 26, 2019



Profile of Deaths

Eight deaths (CFR=0.16%) out of the 5,073 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.

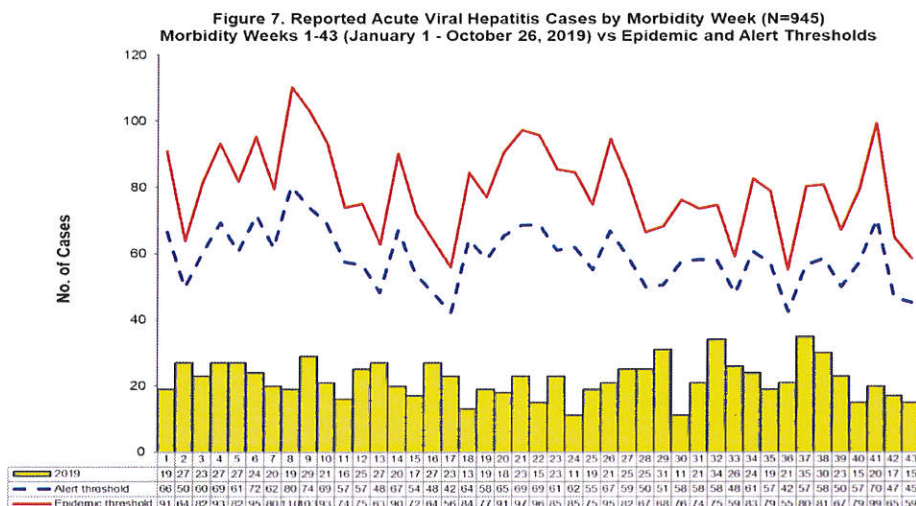


III. Hepatitis A

A. Reported Cases

Trend in the Philippines

A total of 945 reported acute viral hepatitis cases were reported nationwide from January 1 to October 26, 2019. The distribution of cases for 2019 compared to epidemic and alert thresholds is shown below (Figure 7).



Geographical Distribution

There was a 26% decrease of reported acute viral hepatitis cases from 1,279 cases in 2018 to 945 cases in 2019. Most of the reported cases were from the following regions: Region IX (153 or 16%), Region IV-A (125 or 13%) and Region VI (123 or 13%) (Table 6).

Table 6. Reported Acute Viral Hepatitis Cases & Deaths by Region (N=945)
Philippines, January 1 – October 26, 2019 vs 2018 same time period

Region	Cases						Deaths			
	Cases reported for October			Cumulative number of cases reported (Jan. 1-Oct. 26)			Number of deaths reported for October		Cumulative number of deaths reported (Jan. 1-Oct. 26)	
	2018	2019	% Change	2018	2019	% Change	2018	2019	2018	2019
PHILIPPINES	99	67	↓32	1,279	945	↓26	0	0	12	12
I	0	2	↑	31	37	↑19	0	0	1	0
II	1	1	0	22	26	↑18	0	0	0	0
III	6	3	↓50	63	39	↓38	0	0	0	0
IV-A CALABARZON	10	12	↑20	105	125	↑19	0	0	0	2
IV-B MIMAROPA	1	1	0	27	19	↓30	0	0	0	0
V	1	2	↑100	23	15	↓35	0	0	1	0
VI	12	3	↓75	266	123	↓54	0	0	0	1
VII	6	6	0	236	85	↓64	0	0	9	9
VIII	0	0	-	5	3	↓40	0	0	0	0
IX	13	16	↑23	66	153	↑132	0	0	0	0
X	15	3	↓80	124	74	↓40	0	0	0	0
XI	1	1	0	16	26	↑63	0	0	0	0
XII	1	0	↓100	23	15	↓35	0	0	0	0
BARMM	6	5	↓17	31	41	↑32	0	0	0	0
CAR	0	0	-	11	3	↓73	0	0	0	0
CARAGA	7	3	↓57	90	52	↓42	0	0	0	0
NCR	19	9	↓53	140	109	↓22	0	0	1	0

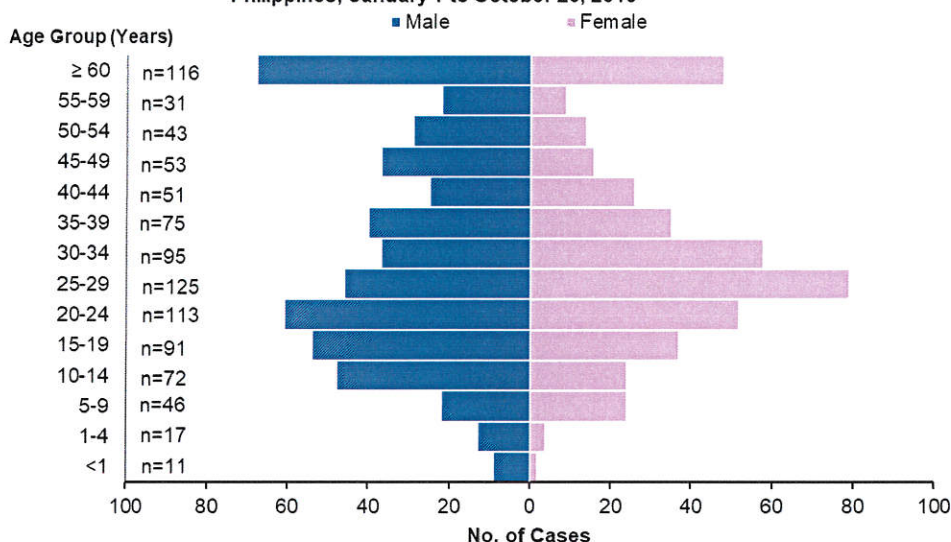


Profile of Cases

Age Group and Sex

Majority of the reported cases were male (514 or 54%). 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 (125 or 13%) (Figure 8).

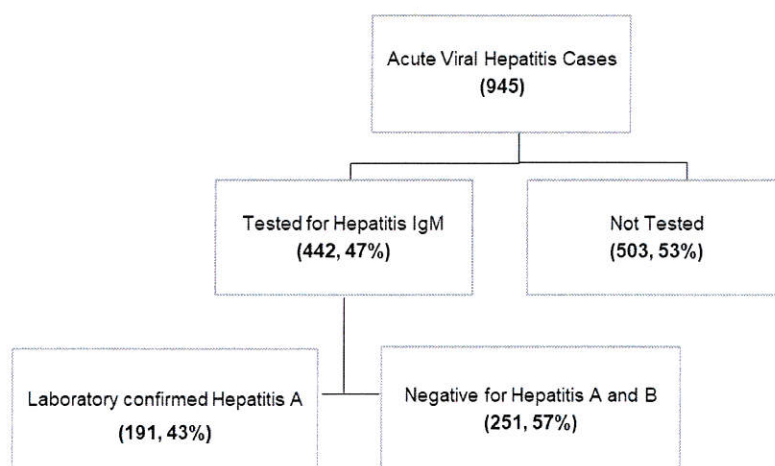
Figure 8. Acute Viral Hepatitis Cases by Age Group and Sex (N=945)
Philippines, January 1 to October 26, 2019



Laboratory Status

A total of 442 (47%) reported cases were tested for Hepatitis A IgM. Among those tested, 191 (43%) were positive for Hepatitis A (Figure 9).

Figure 9. Acute Viral Hepatitis Cases by Case Classification (N=945)
Philippines, January 1 – October 26, 2019



Profile of Deaths

Twelve deaths (CFR=1%) out of the 945 reported acute viral hepatitis cases were reported from Regions IV-A (2 cases in Cavite), Region VI (1 case in Iloilo) and Region VII (8 cases in Cebu and 1 case in Bohol).



B. Confirmed Cases

Geographical Distribution

There was a 35% decrease of confirmed Hepatitis A cases from 292 cases in 2018 to 191 cases in 2019 for the same period (January 1 – October 26, 2019). Region VII (32 or 17%) and Region IX (32 or 17%) reported the highest number of Hepatitis A cases followed by NCR (25 or 13%) as shown below (Table 7).

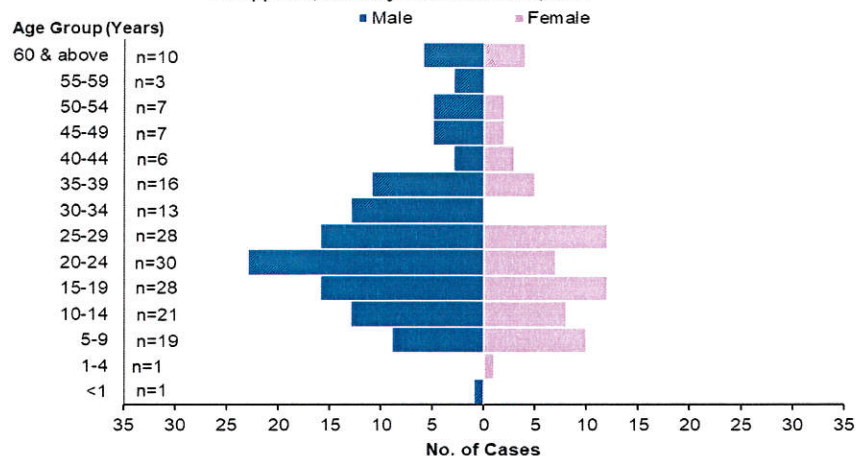
Table 7. Confirmed Hepatitis A Cases & Deaths by Region (n=191)
Philippines, January 1 – October 26, 2019 vs 2018 same time period

Region	Cases						Deaths			
	Cases reported for October			Cumulative number of cases reported (Jan. 1-Oct. 26)			Number of deaths reported for October		Cumulative number of deaths reported (Jan. 1-Oct. 26)	
	2018	2019	% Change	2018	2019	% Change	2018	2019	2018	2019
PHILIPPINES	15	15	0	292	191	↓35	0	0	0	2
I	0	0	-	1	12	↑1,100	0	0	0	0
II	0	0	-	8	2	↓75	0	0	0	0
III	0	1	↑	3	6	↑100	0	0	0	0
IV-A CALABARZON	4	3	↓25	23	18	↓22	0	0	0	0
IV-B MIMAROPA	0	1	↑	3	3	0	0	0	0	0
V	0	0	-	3	1	↓67	0	0	0	0
VI	0	0	-	96	18	↓81	0	0	0	1
VII	1	2	↑100	74	32	↓57	0	0	0	1
VIII	0	0	-	1	0	↓100	0	0	0	0
IX	3	3	0	18	32	↑78	0	0	0	0
X	0	2	↑	9	21	↑133	0	0	0	0
XI	0	1	↑	1	2	↑100	0	0	0	0
XII	1	0	↓100	8	6	↓25	0	0	0	0
BARMM	1	1	0	5	7	↑40	0	0	0	0
CAR	0	0	-	5	2	↓60	0	0	0	0
CARAGA	4	0	↓100	16	4	↓75	0	0	0	0
NCR	1	1	0	18	25	↑39	0	0	0	0

Profile of Cases

Majority of the cases were male (125 or 65%). Age of cases ranged from 2 months to 80 years old (median age of 24 years). The most affected age group were 20 to 24 years (30 or 16%), 15 to 19 years (28 or 15%) and 25 to 29 years (28 or 15%) (Figure 10).

Figure 10. Confirmed Hepatitis A Cases by Age Group and Sex (n=191)
Philippines, January 1 to October 26, 2019



Profile of Deaths

Two deaths (CFR=1%) out of the 191 confirmed hepatitis A cases were reported from Region VI (Iloilo) and Region VII (Cebu).



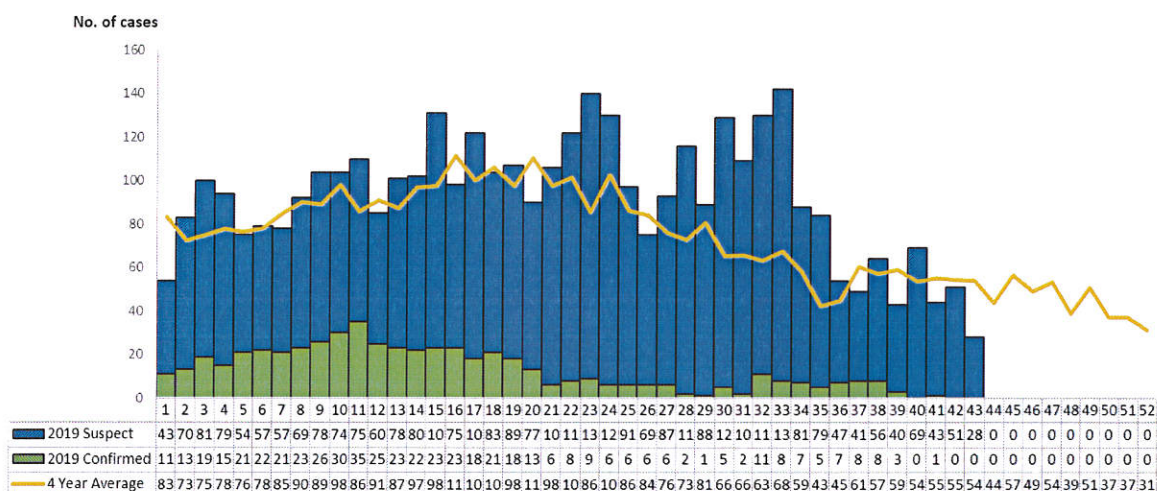
IV. Rotavirus

A. Reported Cases

Trend in the Philippines

A total of 3,965 reported rotavirus cases were reported nationwide from January 1 to October 26, 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=3,965)
Philippines, January 1- October 26, 2019 vs 4 Year Average Data



*same time period

Geographical Distribution

There was a 56% increase of reported Rotavirus cases from 2,535 cases in 2018 to 3,965 cases in 2019. Most of the reported cases were from the following regions: Region VIII (1,396 or 35%), Region V (676 or 17%), Region I (550 or 14%), BARMM (438 or 11%) and Region XII (351 or 9%) (Table 8).

Table 8. Reported Rotavirus Cases & Deaths by Region (N=3,965)
Philippines, January 1 – October 26, 2019 vs 2018 same time period

Region	Cases						Deaths			
	Cases reported for October			Cumulative number of cases reported (Jan. 1-Oct. 26)			Number of deaths reported for October		Cumulative number of deaths reported (Jan. 1-Oct. 26)	
	2018	2019	% Change	2018	2019	% Change	2018	2019	2018	2019
PHILIPPINES	182	192	↑5	2,535	3,965	↑56	3	0	24	36
I*	31	20	↓35	567	550	↓3	1	0	7	4
II	0	0	-	0	0	-	0	0	0	0
III	0	0	-	4	2	↓50	0	0	0	0
IV-A CALABARZON	0	0	-	7	2	↓71	0	0	0	0
IV-B MIMAROPA*	21	2	↓90	205	92	↓55	0	0	0	0
V*	9	35	↑289	287	676	↑136	0	0	0	2
VI*	38	4	↓89	315	137	↓57	0	0	0	1
VII	0	0	-	1	3	↑200	0	0	0	0
VIII	0	103	↑	0	1,396	↑	0	0	0	4
IX	0	0	-	0	0	-	0	0	0	0
X	0	0	-	1	4	↑300	0	0	0	0
XI	0	0	-	0	0	-	0	0	0	0
XII*	26	12	↓54	408	351	↓14	0	0	4	3
BARMM	30	12	↓60	485	438	↓10	2	0	13	21
CAR	0	0	-	0	0	-	0	0	0	0
CARAGA*	15	3	↓80	67	226	↑237	0	0	0	0
NCR*	12	1	↓92	188	88	↓53	0	0	0	1

*Region with selected rotavirus sentinel sites

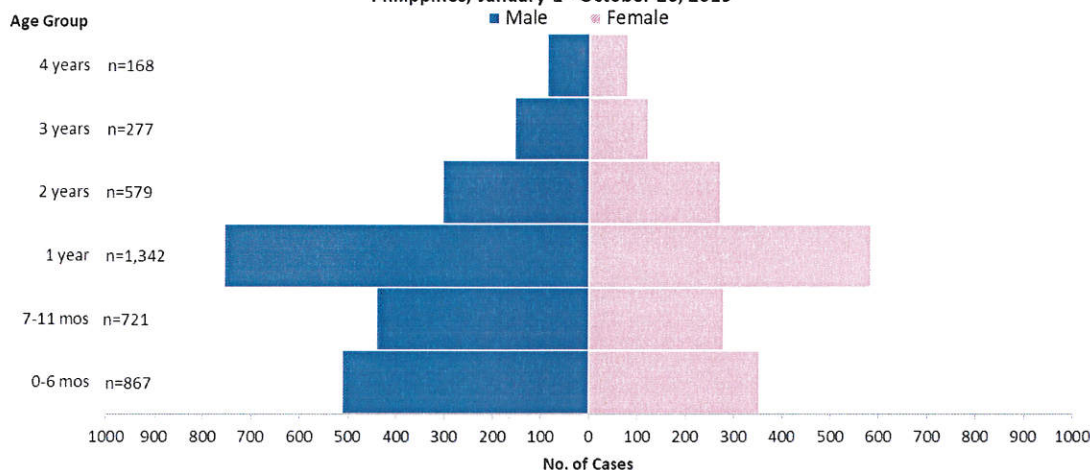


Profile of Cases

Age Group and Sex

Majority of the reported cases were male (2,269 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 (1,342 or 34%) (Figure 12).

Figure 12. Reported Rotavirus Cases by Age Group and Sex (N=3,965)
Philippines, January 1 - October 26, 2019



Note: 11 cases with unspecified age are not reflected in the graph

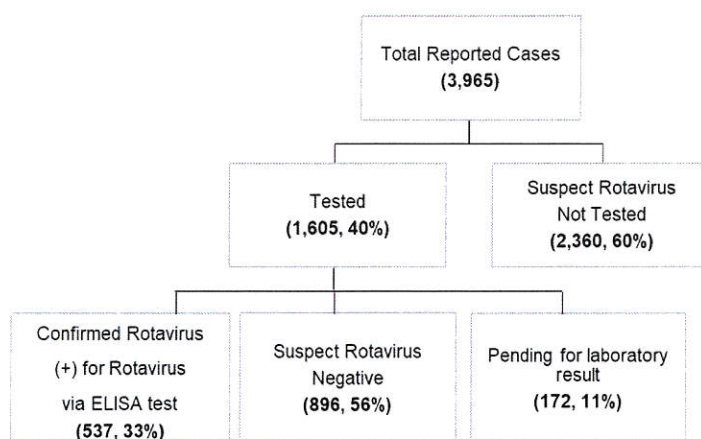
Vaccination Status

Majority of reported rotavirus cases were not vaccinated with rotavirus vaccine (3,921 or 99%). Meanwhile, there were vaccinated cases as follows: 1 dose (11 or 0.3%), 2 doses or more doses (14 or 0.4%) and vaccinated with unknown number of dose (19 or 0.5%).

Laboratory Results

A total of 1,605 (40%) samples were collected for laboratory testing. Of these, 537 (33%) were laboratory confirmed for rotavirus and 896 (56%) were negative (Figure 13).

Figure 13. Reported Rotavirus Cases by Laboratory Status (N=3,965)
Philippines, January 1 – October 26, 2019



Profile of Deaths

Thirty-six deaths (CFR=1%) out of the 3,965 reported rotavirus cases were reported from Regions I (4 cases), V (2 cases), VI (1 case), VIII (4 cases), XII (3 cases), BARMM (21 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 20% decrease of confirmed Rotavirus cases from 669 cases in 2018 to 537 cases in 2019. Most of the reported cases were from the following regions: Region I (217 or 40%), Region V (73 or 14%) and CARAGA (69 or 13%) (Table 9).

Table 9. Confirmed Rotavirus Cases & Deaths by Region (n=537)
Philippines, January 1 – October 26, 2019 vs 2018 same time period

Region	Cases						Deaths			
	Cases reported for October			Cumulative number of cases reported (Jan. 1-Oct. 26)			Number of deaths reported for October		Cumulative number of deaths reported (Jan. 1-Oct. 26)	
	2018	2019	% Change	2018	2019	% Change	2018	2019	2018	2019
PHILIPPINES	51	1	↓98	669	537	↓20	0	0	1	4
I*	4	0	↓100	216	217	↑	0	0	1	2
II	0	0	-	0	0	-	0	0	0	0
III	0	0	-	3	1	↓67	0	0	0	0
IV-A CALABARZON	0	0	-	4	0	↓100	0	0	0	0
IV-B MIMAROPA*	0	0	-	2	0	↓100	0	0	0	0
V*	0	1	↑	54	73	↑35	0	0	0	0
VI*	20	0	↓100	127	43	↓66	0	0	0	0
VII	0	0	-	0	1	↑	0	0	0	0
VIII	0	0	-	0	0	-	0	0	0	0
IX	0	0	-	0	0	0	0	0	0	0
X	0	0	-	0	1	↑	0	0	0	0
XI	0	0	-	0	0	-	0	0	0	0
XII*	7	0	↓100	83	51	↓39	0	0	0	0
BARMM	13	0	↓100	106	67	↓37	0	0	0	2
CAR	0	0	-	0	0	-	0	0	0	0
CARAGA*	3	0	↓100	18	69	↑283	0	0	0	0
NCR*	4	0	↓100	56	14	↓75	0	0	0	0

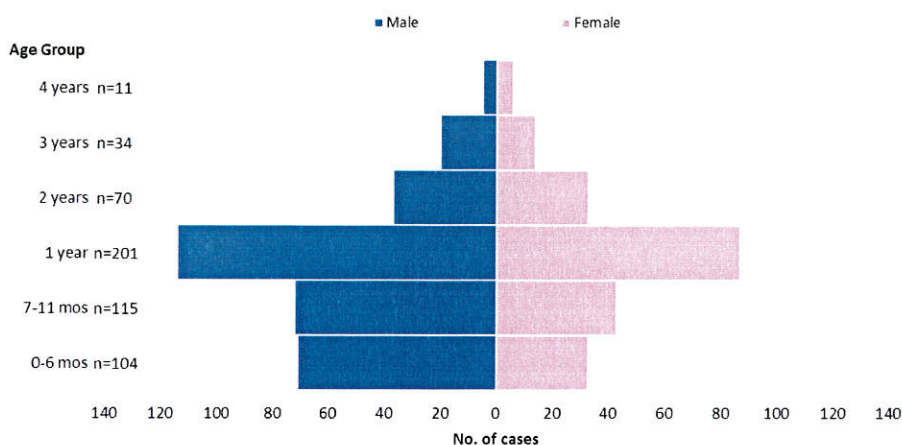
*Region with selected rotavirus sentinel sites

Profile of Cases

Age Group and Sex

Majority of the confirmed cases were male (320 or 60%). 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 (201 or 37%) (Figure 14).

Figure 14. Confirmed Rotavirus Cases by Age group, Sex and Case Classification (n=537)
Philippines, January 1- October 26, 2019





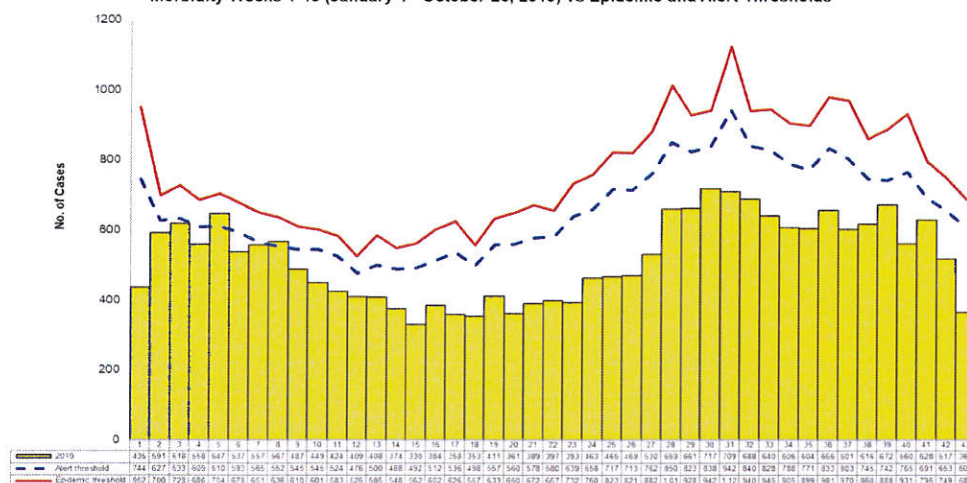
V. Typhoid Fever

A. Reported Cases

Trend in the Philippines

A total of 22,263 reported typhoid fever cases were reported nationwide from January 1 to October 26, 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=22,263)
Morbidity Weeks 1-43 (January 1 - October 26, 2019) vs Epidemic and Alert Thresholds



Geographical Distribution

There was a 17% increase of reported typhoid fever cases from 19,031 cases in 2018 to 22,263 cases in 2019. Most of the reported cases were from the following regions: CAR (3,769 or 17%), Region X (3,549 or 16%), Region VI (2,344 or 11%), Region XII (1,954 or 9%) and Region I (1,575 or 7%) (Table 10).

Table 10. Typhoid Fever Cases and Deaths by Region (N=22,263)
Philippines, January 1 – October 26, 2019 vs 2018 same time period

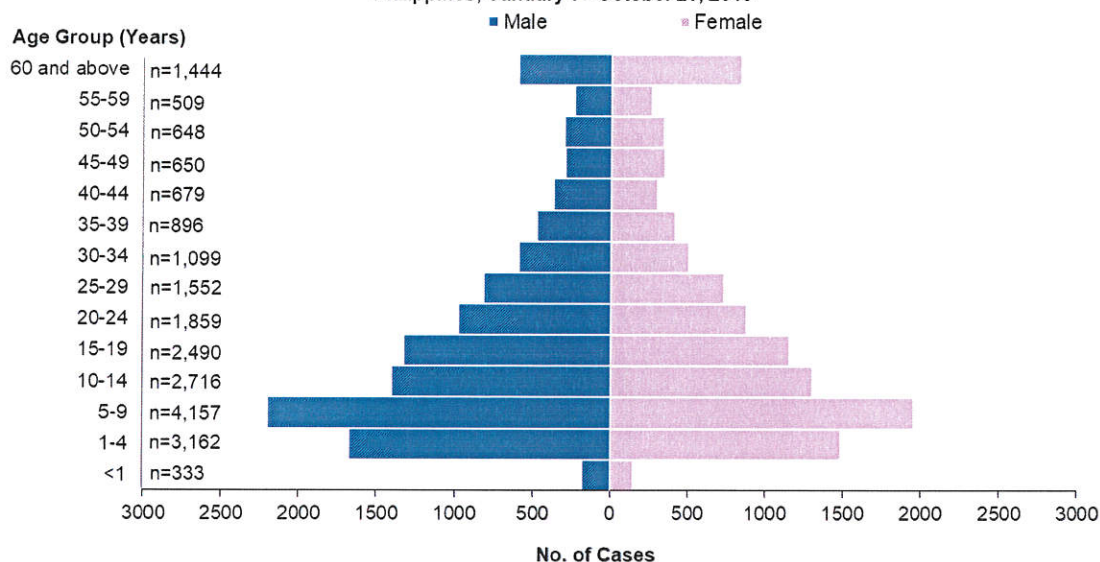
Region	Cases						Deaths			
	Cases reported for October			Cumulative number of cases reported (Jan. 1-Oct. 26)			Number of deaths reported for October		Cumulative number of deaths reported (Jan. 1-Oct. 26)	
	2018	2019	% Change	2018	2019	% Change	2018	2019	2018	2019
PHILIPPINES	1,882	2,070	↑10	19,031	22,263	↑17	2	3	29	36
I	87	279	↑221	752	1,575	↑109	0	0	0	2
II	51	58	↑14	506	767	↑52	0	0	0	1
III	44	65	↑48	495	627	↑27	0	0	0	0
IV-A CALABARZON	143	126	↓12	1,499	1,461	↓3	0	0	0	2
IV-B MIMAROPA	24	32	↑33	303	357	↑18	0	0	0	2
V	40	23	↓43	303	224	↓26	1	0	3	3
VI	295	135	↓54	2,342	2,344	↑	0	0	5	4
VII	152	95	↓38	1,209	1,329	↑10	0	0	6	5
VIII	28	19	↓32	600	358	↓40	0	1	2	2
IX	107	84	↓21	1,103	1,285	↑17	1	0	4	5
X	271	233	↓14	3,561	3,549	↓0.3	0	0	1	0
XI	12	16	↑33	170	236	↑39	0	0	0	0
XII	148	92	↓38	1,647	1,954	↑	0	0	2	1
BARMM	131	73	↓44	1,415	1,569	↑11	0	0	1	6
CAR	221	684	↑210	1,924	3,769	↑96	0	1	0	2
CARAGA	81	32	↓60	805	438	↓46	0	0	0	0
NCR	47	24	↓49	397	421	↑6	0	1	5	1



Profile of Cases

Majority of the reported cases were male (11,563 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 (4,157 or 19%) (Figure 16).

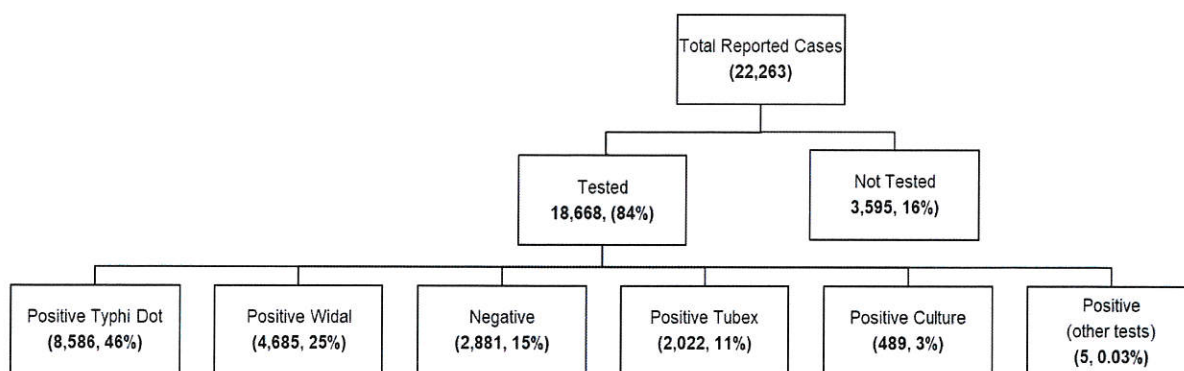
Figure 16. Reported Typhoid Fever Cases by Age Group and Sex (N=22,263)
Philippines, January 1 - October 26, 2019



Laboratory Results

A total of 18,668 (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=22,263)
Philippines, January 1 – October 26, 2019



Profile of Deaths

Thirty-six deaths (CFR=0.2%) out of the 22,263 reported typhoid fever cases. Age range from 7 days to 73 years old (median: 36 years).



B. Confirmed Cases
Geographical Distribution

There was an 54% increase of confirmed typhoid fever cases from 317 cases in 2018 to 489 cases in 2019. Most of the reported cases were from the following regions: Region VIII (93 or 19%), BARMM (76 or 16%), Region IX (73 or 15%), Region I (54 or 11%) and Region VII (51 or 10%) (Table 11).

Table 11. Confirmed Typhoid Fever Cases and Deaths by Region (n=489)
Philippines, January 1 – October 26, 2019 vs 2018 same time period

Region	Cases						Deaths			
	Cases reported for October			Cumulative number of cases reported (Jan. 1-Oct. 26)			Number of deaths reported for October		Cumulative number of deaths reported (Jan. 1-Oct. 26)	
	2018	2019	% Change	2018	2019	% Change	2018	2019	2018	2019
PHILIPPINES	33	38	↑15	317	489	↑54	1	0	4	0
I	0	21	↑	6	54	↑800	0	0	0	0
II	1	1	0	21	34	↑62	0	0	0	0
III	0	1	↑	6	3	↓50	0	0	0	0
IV-A CALABARZON	0	1	↑	7	10	↑43	0	0	0	0
IV-B MIMAROPA	1	0	↓100	8	3	↓63	0	0	0	0
V	0	1	↑	3	7	↑133	0	0	0	0
VI	1	1	0	9	17	↑89	0	0	0	0
VII	5	3	↓40	55	51	↓7	0	0	1	0
VIII	7	7	0	68	93	↑37	0	0	1	0
IX	8	0	↓100	54	73	↑35	1	0	1	0
X	0	0	-	12	5	↓58	0	0	0	0
XI	2	1	↓50	6	9	↑50	0	0	0	0
XII	0	0	-	4	24	↑500	0	0	0	0
BARMM	6	1	↓83	21	76	↑262	0	0	0	0
CAR	1	0	↓100	4	6	↑50	0	0	0	0
CARAGA	0	0	-	6	3	↓50	0	0	0	0
NCR	1	0	↓100	27	21	↓22	0	0	1	0

Profile of Cases

Age Group and Sex

Majority of the confirmed cases were male (252 or 52%). Age of cases ranged from 2 months to 85 years old (median age of 14 years). Most affected age group is 5 to 9 years old (104 or 21%) (Figure 18).

Figure 18. Confirmed Typhoid Fever Cases by Age Group and Sex (n=489)
Philippines, January 1 - October 26, 2019

