



### Leptospirosis

Leptospirosis is a group of zoonotic bacterial diseases with variable manifestations. Disease transmission may be through: contact of skin, especially if abraded, or of mucous membranes with moist soil, vegetation contaminated with urine with infected animals or contaminated water as swimming, wading in flood waters, accidental immersion or occupational abrasion; direct contact with urine or tissues of infected animals.

Table 1. Leptospirosis Cases in the Philippines, 2018\* vs 2017

Region	2017		2018*		Percent Change in Cases	
	Cases	Deaths	Cases	Deaths		
Philippines	834	90	1467	153	↑	76

### PIDSR Case Definition for Leptospirosis

<b>Suspected Case</b>	<p>A person who developed acute febrile illness with headache, myalgia and prostration associated with any of the following possibly after exposure to infected animals or an environment contaminated with animal urine</p> <ul style="list-style-type: none"><li>• Conjunctival suffocation</li><li>• Meningeal irritation</li><li>• Anuria or Oliguria and/ or proteinuria</li><li>• Jaundice</li><li>• Hemorrhages (from intestines or lungs)</li><li>• Cardiac arrhythmia or failure</li><li>• Skin rash</li></ul>
<b>Probable Case</b>	<p>A suspected case in an ongoing epidemic or an environment contaminated with animal urine (e.g. wading in water floods, rice fields, drainage)</p>
<b>Confirmed Case</b>	<p>A suspected case that is laboratory confirmed.</p>

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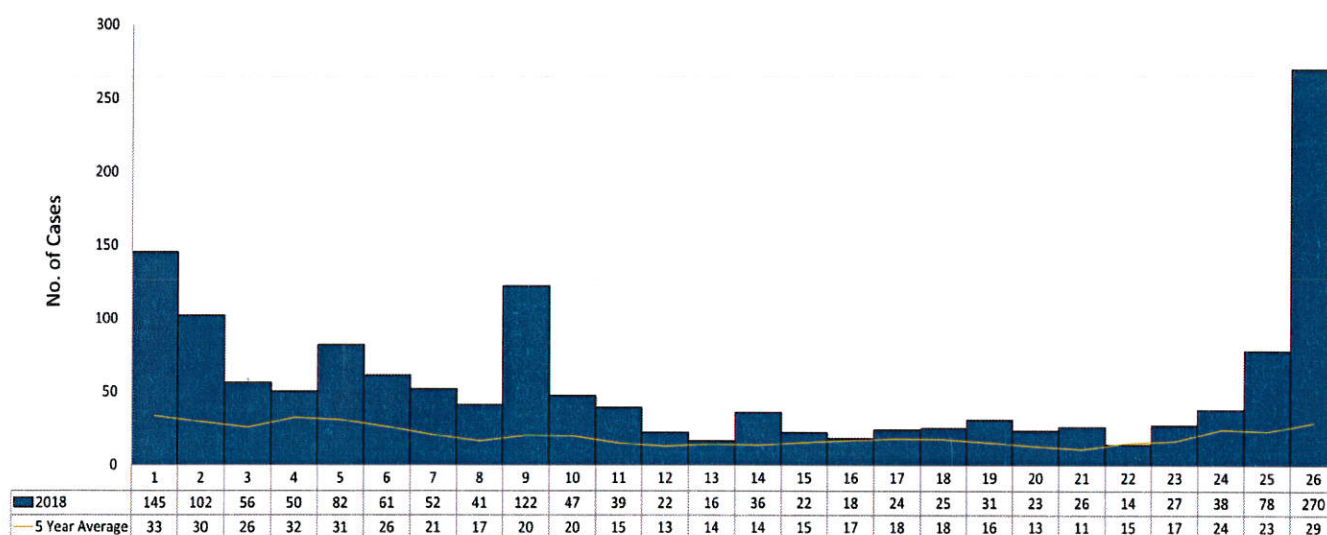
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### I. Trend in the Philippines

A total of **1,467** leptospirosis cases were reported nationwide from January to June 30, 2018 (Figure 1). This is **76%** higher compared to the same time period last year (**834**) (Table 1).

**Figure 1. Reported Leptospirosis Cases by Morbidity Week (N=1,467)  
Philippines, January to June 2018 vs. 5 Year Average Data**



\*Same time period

### II. Geographic Distribution of Cases

Most of the cases were from the following regions: **NCR** (369, 25%), **REGION VI** (235, 16%), **CARAGA** (173, 12%), **REGION XI** (91, 6%) and **REGION IX** (85, 6%).

**Table 2. Reported Leptospirosis Cases by Region,  
Philippines, January to June, 2018\* (N=1,467)**

Region	2017		2018*		Percent Change in Cases
	Cases	Deaths	Cases	Deaths	
<b>Philippines</b>	<b>834</b>	<b>90</b>	<b>1467</b>	<b>153</b>	<b>↑ 76</b>
<b>I</b>	<b>47</b>	<b>9</b>	<b>62</b>	<b>12</b>	<b>↑ 32</b>
<b>II</b>	78	5	63	4	↓ 19
<b>III</b>	65	8	59	4	↓ 9
<b>IV-A</b>	<b>26</b>	<b>4</b>	<b>81</b>	<b>9</b>	<b>↑ 212</b>
<b>IV-B</b>	<b>3</b>	<b>0</b>	<b>13</b>	<b>1</b>	<b>↑ 333</b>
<b>V</b>	<b>37</b>	<b>2</b>	<b>55</b>	<b>3</b>	<b>↑ 49</b>
<b>VI</b>	<b>91</b>	<b>10</b>	<b>235</b>	<b>30</b>	<b>↑ 158</b>
<b>VII</b>	<b>45</b>	<b>9</b>	<b>52</b>	<b>8</b>	<b>↑ 16</b>
<b>VIII</b>	73	8	56	4	↓ 23
<b>IX</b>	<b>9</b>	<b>3</b>	<b>85</b>	<b>3</b>	<b>↑ 844</b>
<b>X</b>	61	2	35	5	↓ 43
<b>XI</b>	96	4	91	8	↓ 5
<b>XII</b>	<b>5</b>	<b>0</b>	<b>8</b>	<b>2</b>	<b>↑ 60</b>
<b>ARMM</b>	<b>2</b>	<b>0</b>	<b>7</b>	<b>1</b>	<b>↑ 250</b>
<b>CAR</b>	<b>20</b>	<b>2</b>	<b>23</b>	<b>1</b>	<b>↑ 15</b>
<b>CARAGA</b>	<b>28</b>	<b>3</b>	<b>173</b>	<b>4</b>	<b>↑ 518</b>
<b>NCR</b>	<b>148</b>	<b>21</b>	<b>369</b>	<b>54</b>	<b>↑ 149</b>

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

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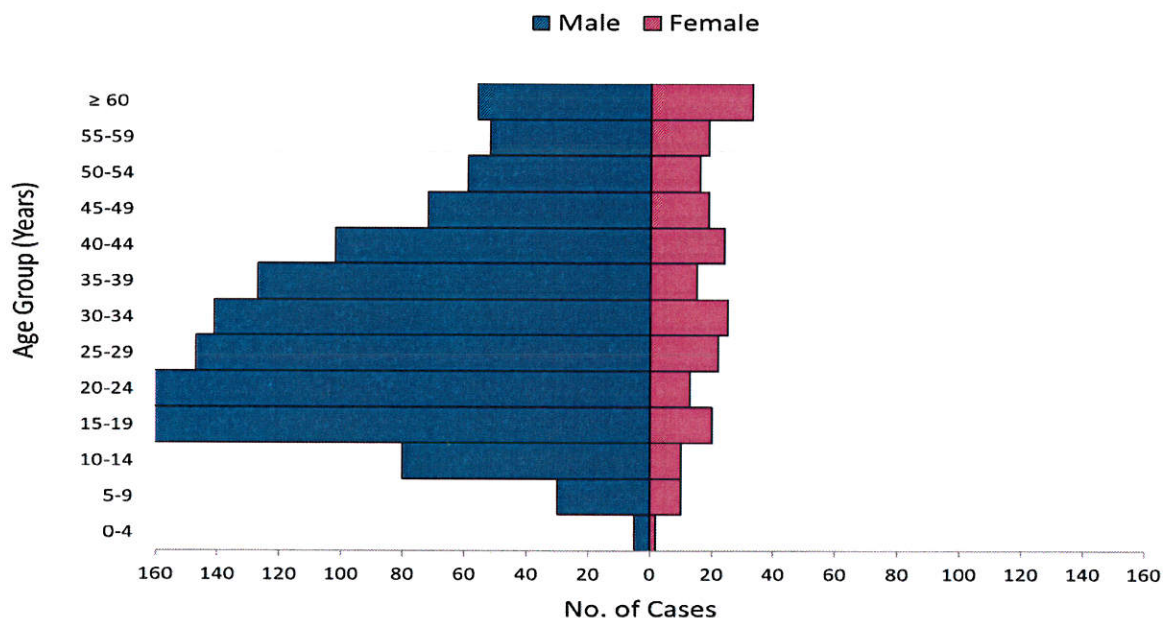




### I. Profile of Cases

Age of cases ranged from less than 1 year to 88 years (median = 30 years). Majority (1,237, 84%) of cases were male. Most (207, 14%) of the cases belonged to the age group of 15-19 years old. There were 153 deaths (CFR = 10.43%).

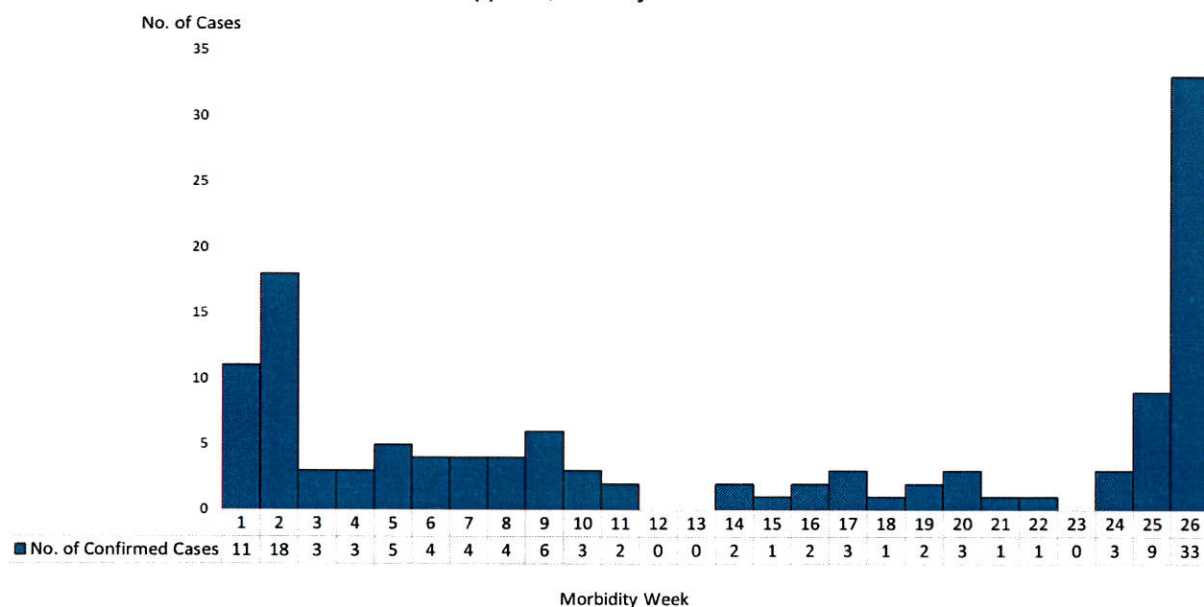
**Figure 2. Reported Leptospirosis Cases by Age Group and Sex (N=1,467)**  
Philippines, January to June, 2018\*



### II. Profile of Confirmed Leptospirosis Cases

Out of the 1,467 reported leptospirosis cases, a total of 124 confirmed leptospirosis cases were reported nationwide from January to June 30, 2018.

**Figure 3. Confirmed Leptospirosis by Morbidity Week, (n=124)**  
Philippines, January to June 2018



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#### V. Geographic Distribution of Confirmed Leptospirosis Cases

Most of the confirmed leptospirosis cases were from the following regions: **NCR** (51, 41%), **REGION VI** (18, 14%), **REGION IV-A** (12, 10%), **REGION XI** (10, 8%) and **REGION IX** (9, 7%). Regions with the highest confirmed leptospirosis case fatality rate were: **REGION I** (28.57%), **REGION XI** (20.00%) and **REGION VI** (16.67%).

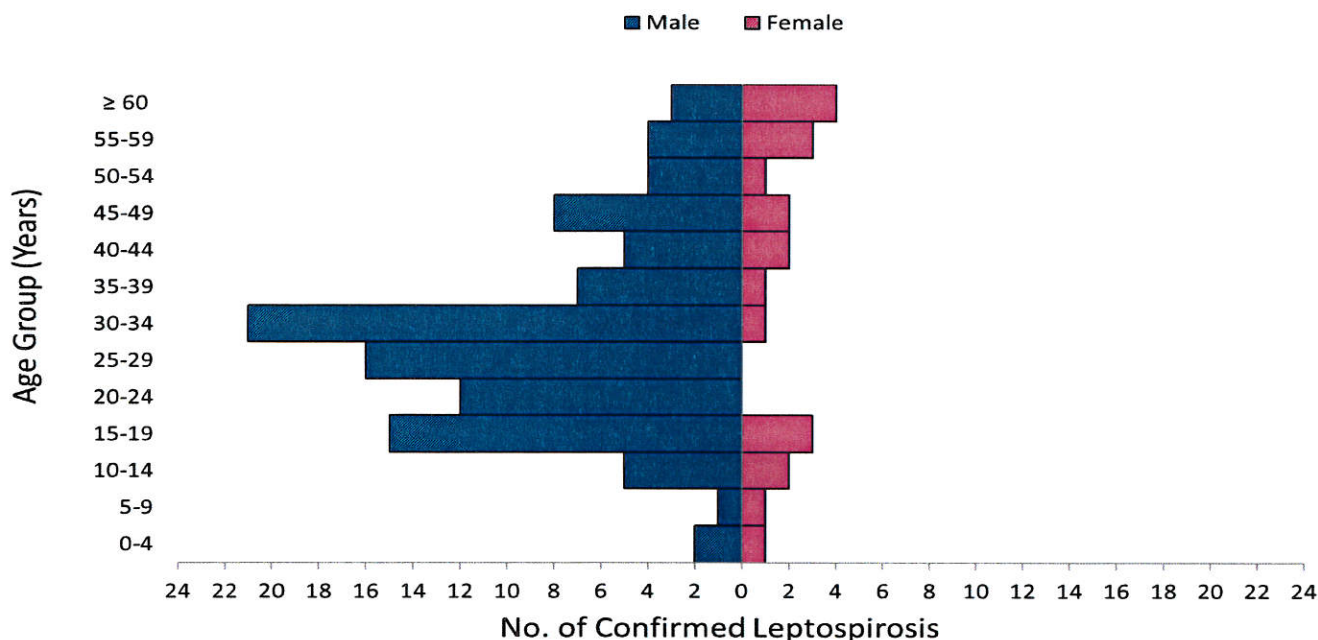
**Table 3. Confirmed Leptospirosis Cases by Region (n=124)**  
Philippines, January to June 2018

Region	Cases	Deaths	CFR%
<b>PHILIPPINES</b>	<b>124</b>	<b>12</b>	<b>9.68</b>
I	7	2	28.57
II	2	0	0.00
III	1	0	
IV-A	12	0	0.00
MIMAROPA	1	0	0.00
V	2	0	0.00
VI	18	3	16.67
VIII	2	0	0.00
IX	9	0	0.00
X	1	0	0.00
XI	10	2	20.00
CAR	1	0	0.00
CARAGA	7	0	0.00
NCR	51	5	9.80

#### VI. Sex and Age Group of Confirmed Leptospirosis Cases

Age of confirmed leptospirosis cases ranged from less than 1 year to 72 years (median = 30 years). Majority (103, 83%) of confirmed cases were male. Most (3, 25%) of the confirmed leptospirosis deaths belonged to the age group of 25-29 years old.

**Figure 4. Confirmed Leptospirosis Cases by Age Group and Sex (n=124)**  
Philippines, January to June, 2018\*



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#### VII. Laboratory Status of Leptospirosis Cases

Out of the 1,467 reported leptospirosis cases, there are 487 cases (33%) tested for laboratory confirmation. Out of the tested, 124 cases (25.46%) yielded for positive results, 289 cases (59.34%) yielded for negative results, 4 cases (0.82%) are IgM positive (probable leptospirosis), while there are 70 cases (14.37%) awaiting for laboratory results (Figure 5).

Figure 5. Laboratory Status of Reported Leptospirosis Cases  
Philippines, January to June, 2018\*

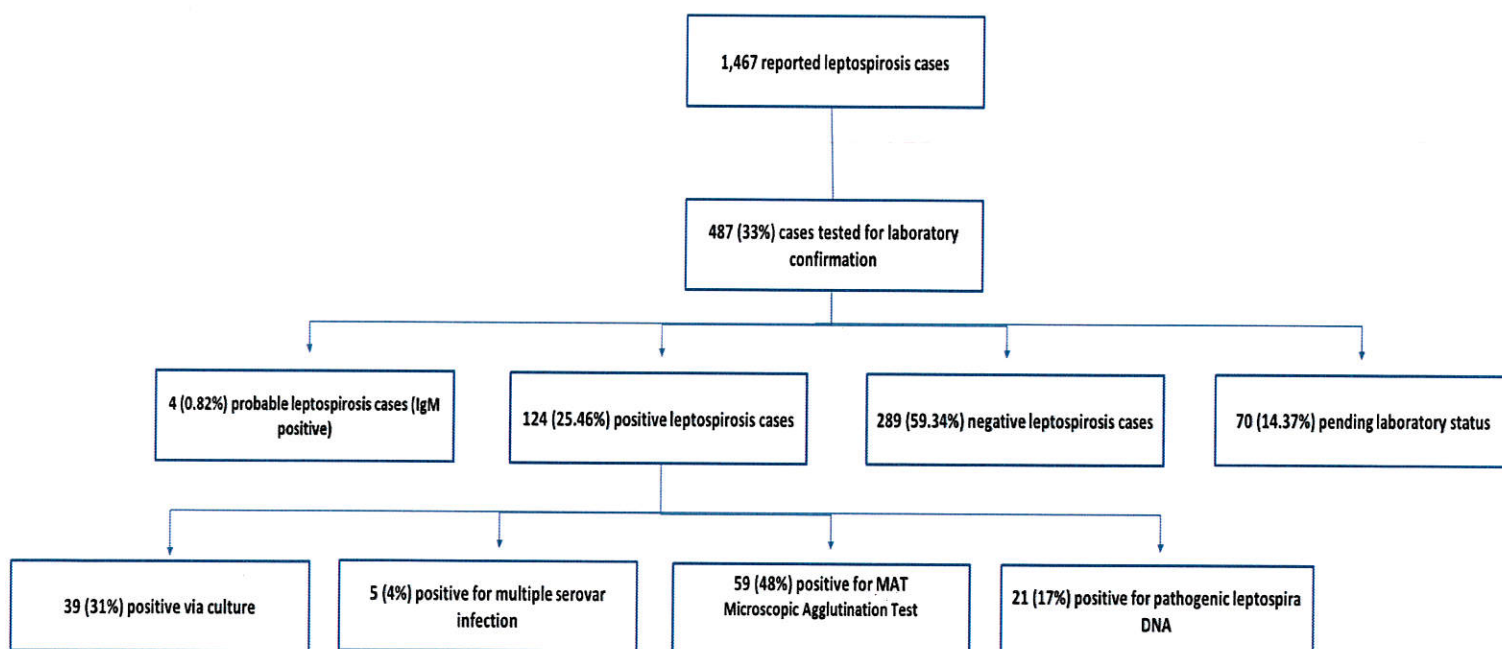
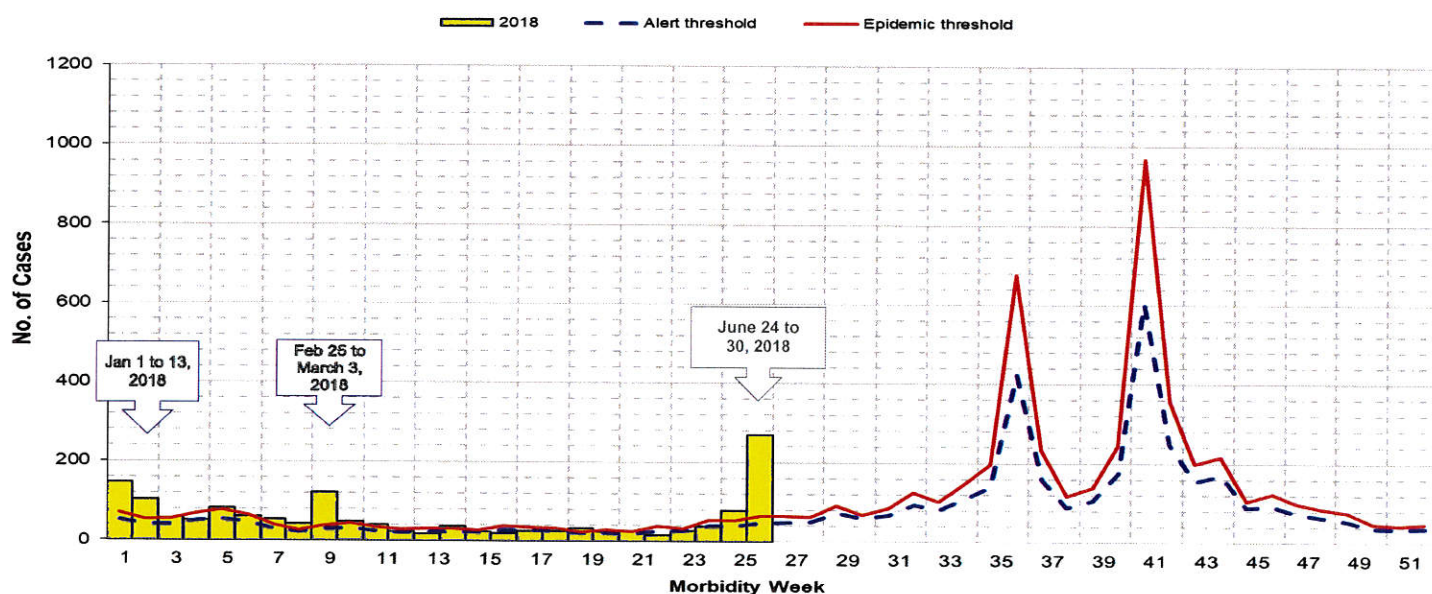


Figure 6. Reported Leptospirosis Alert and Epidemic Thresholds,  
Philippines as of January 1-June 30, 2018 (N=1,467)



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Figures 7-23. Leptospirosis Alert and Epidemic Thresholds per Region as of January 1-June 30, 2018

Fig. 7 Reported Leptospirosis Cases by Morbidity Week  
Region I, as of January 1-June 30, 2018 (n=62)

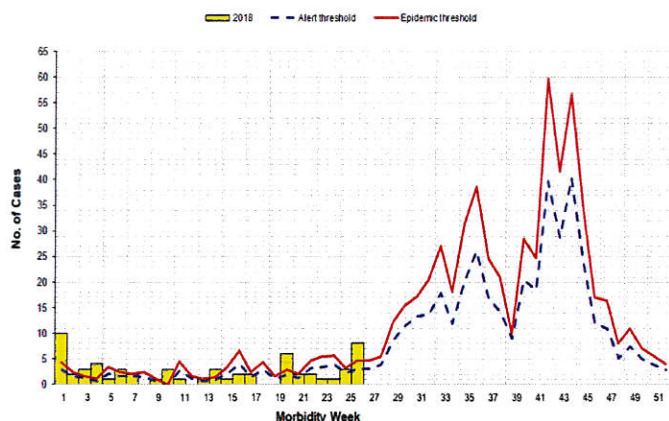


Fig. 8 Reported Leptospirosis Cases by Morbidity Week  
Region II, as of January 1-June 30, 2018 (n=63)

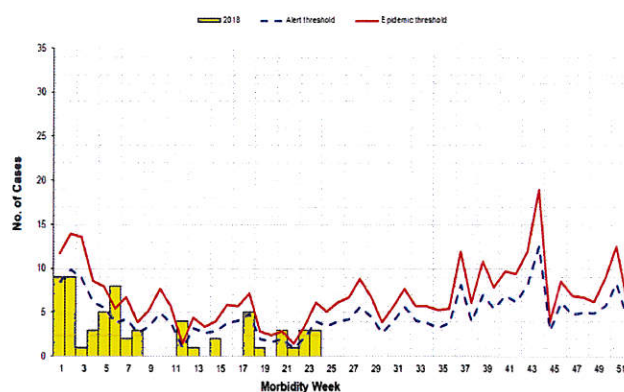


Fig. 9 Reported Leptospirosis Cases by Morbidity Week  
Region III, as of January 1-June 30, 2018 (n=59)

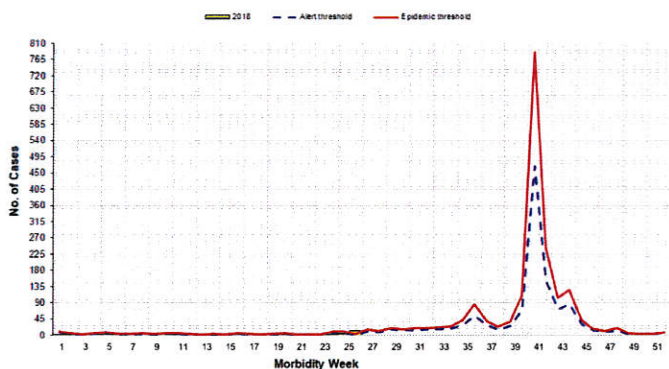


Fig. 10 Reported Leptospirosis Cases by Morbidity Week  
Region IV-A, as of January 1-June 30, 2018 (n=81)

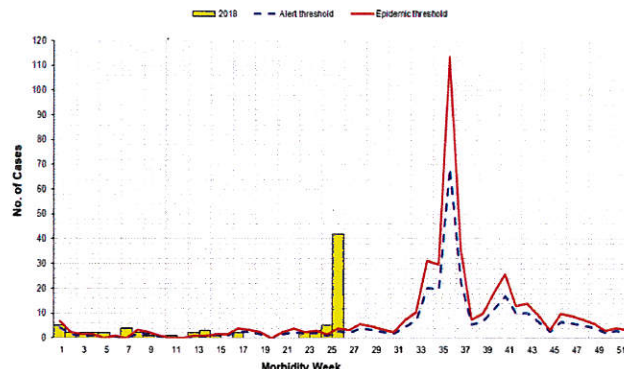


Fig. 11 Reported Leptospirosis Cases by Morbidity Week  
Region IV-B, as of January 1-June 30, 2018 (n=13)

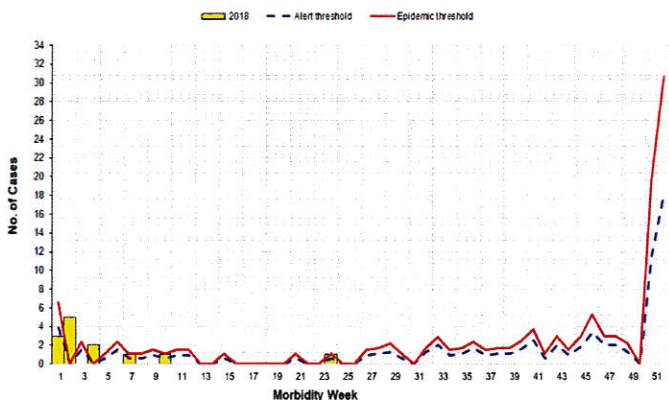
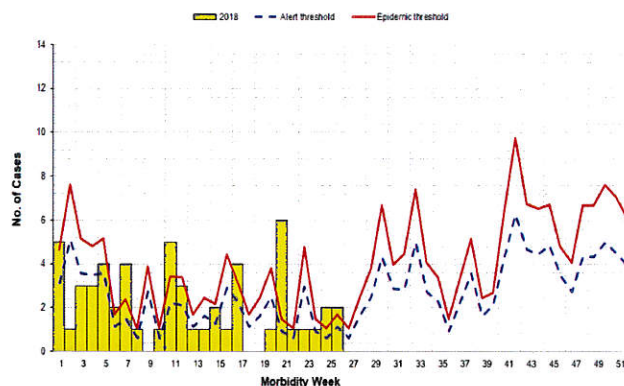


Fig. 12 Reported Leptospirosis Cases by Morbidity Week  
Region V, as of January 1-June 30, 2018 (n=55)



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Figures 7-23. Leptospirosis Alert and Epidemic Thresholds per Region as of January 1-June 30, 2018

Fig. 13 Reported Leptospirosis Cases by Morbidity Week  
Region VI, as of January 1-June 30, 2018 (n=235)

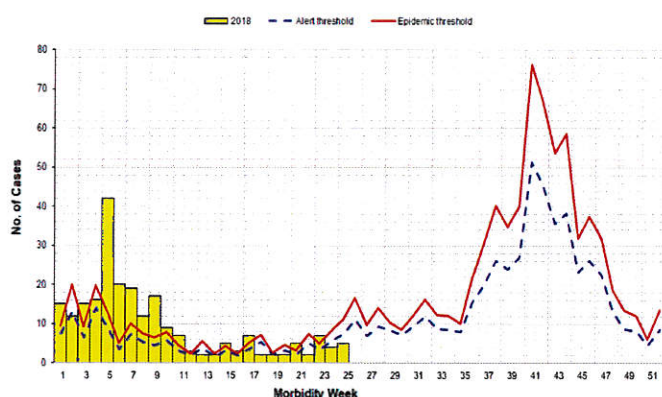


Fig. 14 Reported Leptospirosis Cases by Morbidity Week  
Region VII, as of January 1-June 30, 2018 (n=52)

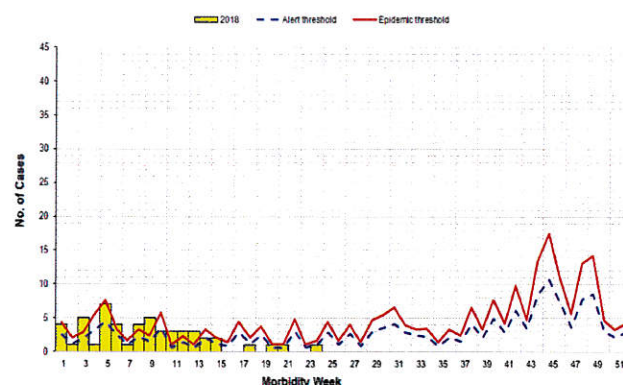


Fig. 15 Reported Leptospirosis Cases by Morbidity Week  
Region VIII, as of January 1-June 30, 2018 (n=56)

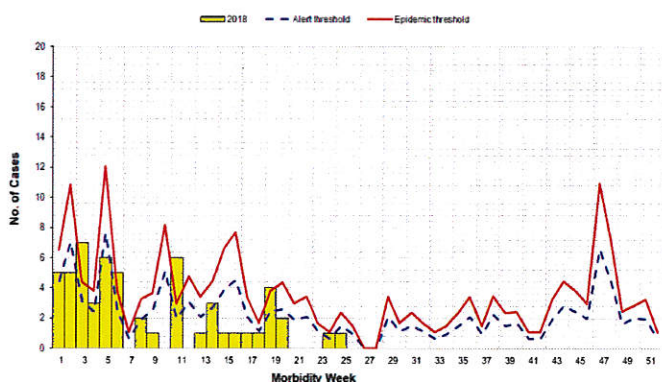


Fig. 16 Reported Leptospirosis Cases by Morbidity Week  
Region IX, as of January 1-June 30, 2018 (n=85)

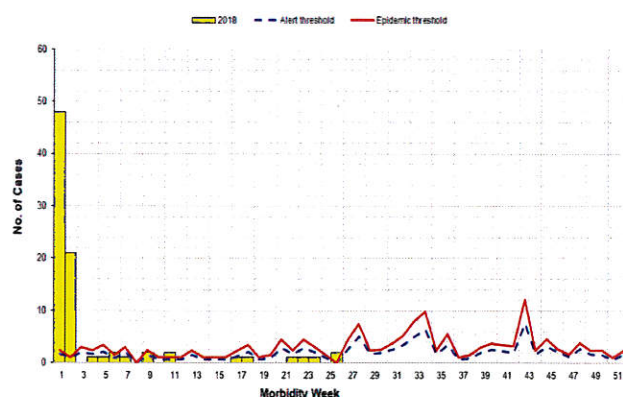


Fig. 17 Reported Leptospirosis Cases by Morbidity Week  
Region X, as of January 1-June 30, 2018 (n=35)

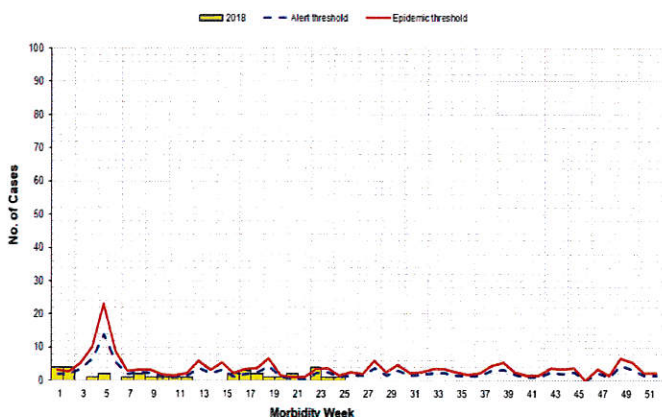
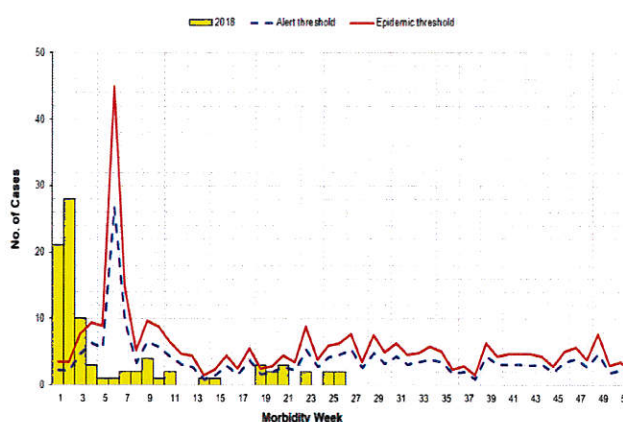


Fig. 18 Reported Leptospirosis Cases by Morbidity Week  
Region XI, as of January 1-June 30, 2018 (n=91)



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Figures 7-23. Leptospirosis Alert and Epidemic Thresholds per Region as of January 1-June 30, 2018

Fig. 19 Reported Leptospirosis Cases by Morbidity Week  
Region XII, as of January 1-June 30, 2018 (n=8)

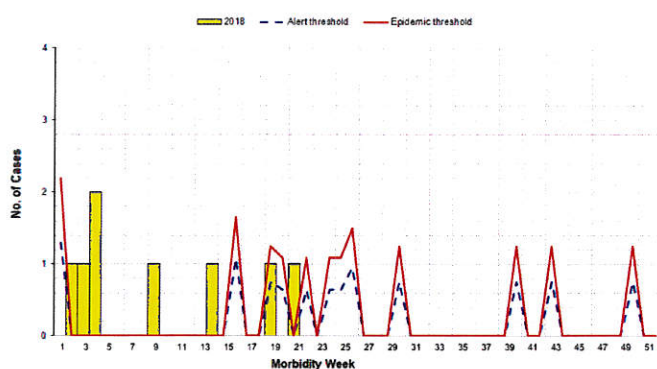


Fig. 20 Reported Leptospirosis Cases by Morbidity Week  
Region ARMM, as of January 1-June 30, 2018 (n=7)

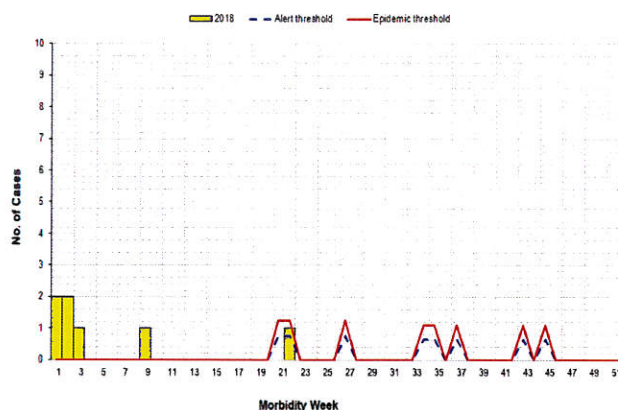


Fig. 21 Reported Leptospirosis Cases by Morbidity Week  
Region CAR, as of January 1-June 30, 2018 (n=23)

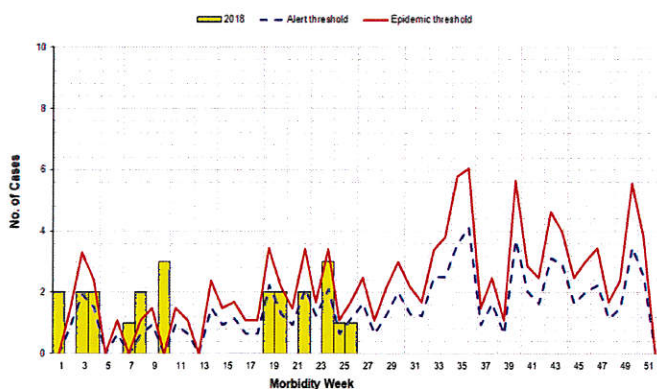


Fig. 22 Reported Leptospirosis Cases by Morbidity Week  
Region CARAGA, as of January 1-June 30, 2018 (n=173)

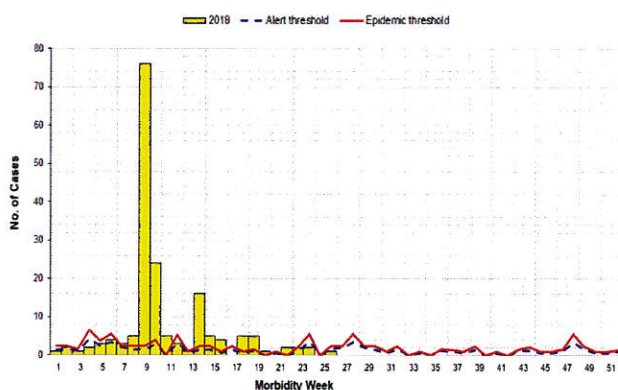
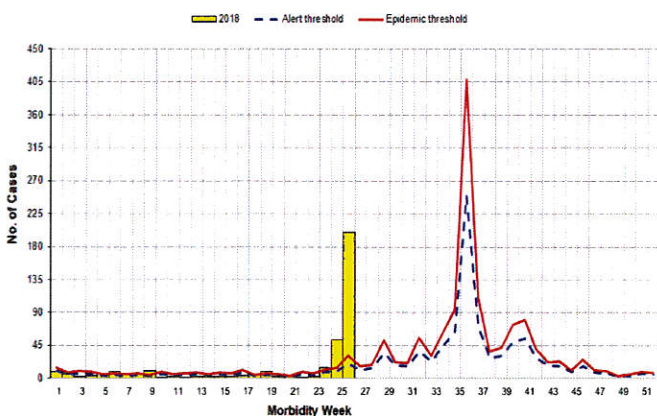


Fig. 23 Reported Leptospirosis Cases by Morbidity Week  
Region NCR, as of January 1-June 30, 2018 (n=369)



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