



Leptospirosis

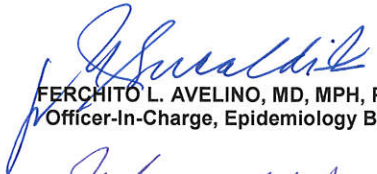



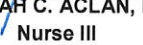

Leptospirosis is a group of zoonotic bacterial diseases with variable manifestations. Disease transmission may be through: contact of skin, especially if abraded, or of mucous membranes with moist soil, vegetation contaminated with urine with infected animals or contaminated water as swimming, wading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

Table 1. Leptospirosis Cases in the Philippines, 2019* vs 2018

Region	2019		2018		Percent Change in Cases	
	Cases	Deaths	Cases	Deaths		
Philippines	480	60	1048	103	↓	54

PIDSR Case Definition for Leptospirosis

Suspected Case	<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">• Congunctival suffocation• Meningeal irritation• Anuria or Oliguria and/ or proteinuria• Jaundice• Hemorrhages (from intestines or lungs)• Cardiac arrhythmia or failure• Skin rash
Probable Case	<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>
Confirmed Case	<p>A suspected case that is laboratory confirmed.</p>

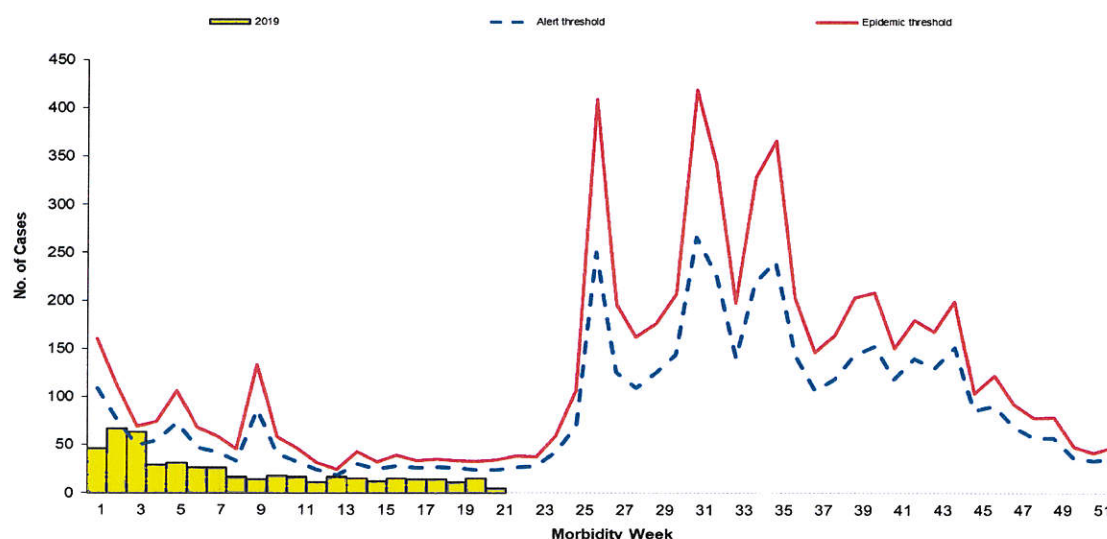
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I. Trend in the Philippines

A total of **480** leptospirosis cases were reported nationwide from January 1 to May 25, 2019 [Figure 1]. This is **54%** lower compared to the same time period last year (**1,048**) [Table 2].

Figure 1. Reported Leptospirosis Cases by Morbidity Week (N=480)
Philippines, January 1 to May 25, 2019 Alert and Epidemic Threshold



II. Geographic Distribution of Cases

Most of the cases were from the following regions: **NCR** (116 or 24%), **REGION V** (80 or 17%), **REGION VI** (61 or 13%), **REGION II** (44 or 9%) and **REGION III** (37 or 8%).

Table 2. Reported Leptospirosis Cases by Region, Philippines, May 2019* (N=480) vs. May 2018**

Region	2019		2018		Percent Change in Cases
	Cases	Deaths	Cases	Deaths	
Philippines	480	60	1048	103	↓ 54
I	14	4	48	11	↓ 71
II	44	5	57	4	↓ 23
III	37	3	39	3	↓ 5
IV-A	33	5	29	1	↑ 14
MIMAROPA	5	1	12	1	↓ 58
V	80	3	50	2	↑ 60
VI	61	7	216	27	↓ 72
VII	14	3	51	7	↓ 73
VIII	14	1	54	4	↓ 74
IX	12	3	82	5	↓ 85
X	9	1	29	5	↓ 69
XI	18	2	85	7	↓ 79
XII	3	0	8	2	↓ 63
ARMM	2	0	6	1	↓ 67
CAR	9	3	16	0	↓ 44
CARAGA	9	1	168	4	↓ 95
NCR	116	18	98	19	↑ 18

*From period of January 1 to May 25, 2019

**From period of January 1 to May 25, 2018

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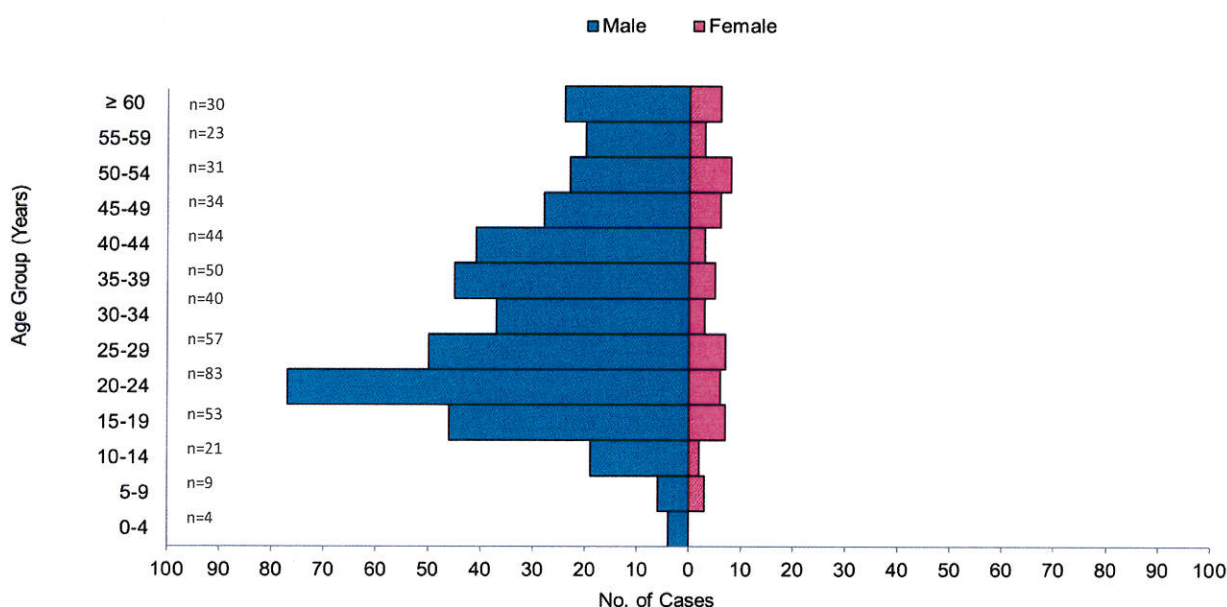
Percentage Total may not equal to 100 due to rounding-off figures.



III. Profile of Cases

Age of cases ranged from less than 1 year to 88 years (median = 31 years) [Figure 2]. Majority (421 or 88%) of cases were male. Most (83 or 17%) of the cases belonged to the age group of 20-24 years old. There were 60 deaths (CFR = 12.50%).

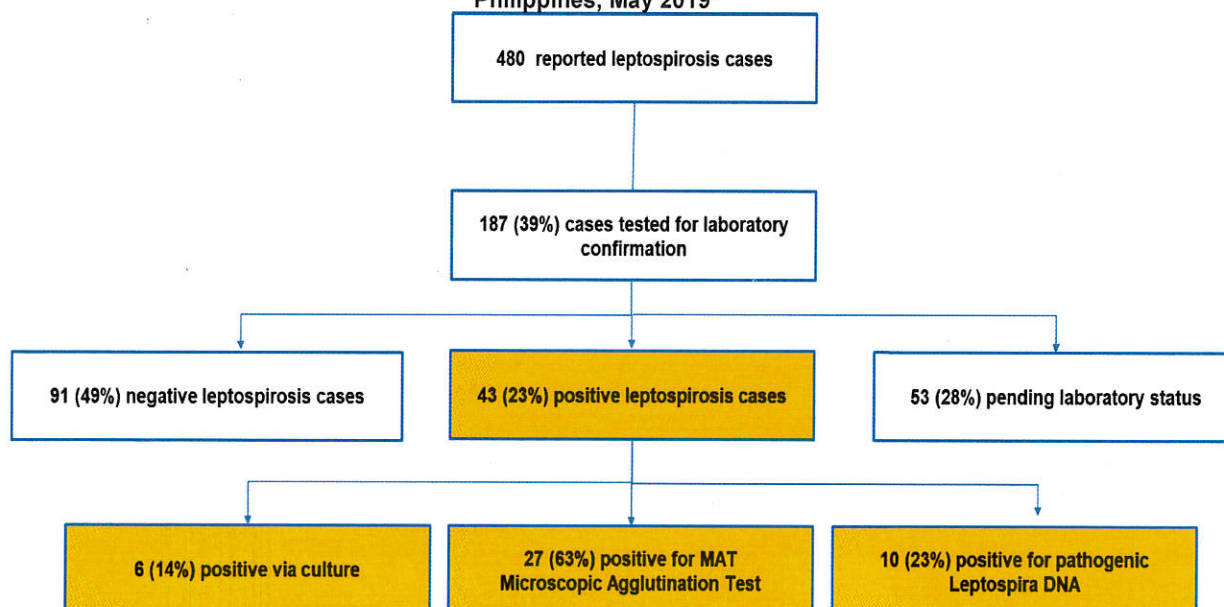
**Figure 2. Reported Leptospirosis Cases by Age Group and Sex (N=480)
Philippines, May 2019***



IV. Laboratory Status of Leptospirosis Cases

Out of the 480 reported leptospirosis cases, 187 cases (39%) were tested for laboratory confirmation. Of these, 43 cases (23%) yielded positive results [Figure 3].

**Figure 3. Laboratory Status of Reported Leptospirosis Cases
Philippines, May 2019***



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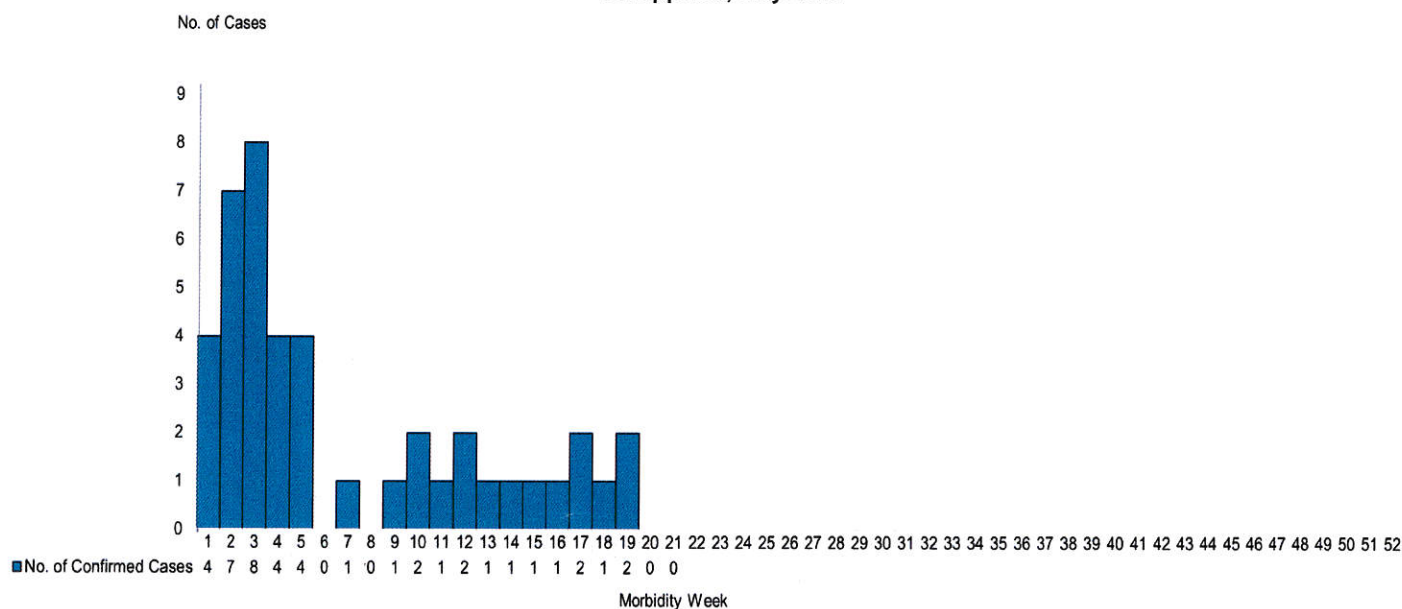
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V. Profile of Confirmed Leptospirosis Cases

A total of **43** confirmed leptospirosis cases were reported nationwide from January 1 to May 25, 2019. Most of the cases (8 or 19%) were reported on Morbidity Week 3 [Figure 4].

Figure 4. Confirmed Leptospirosis by Morbidity Week (n=43)
Philippines, May 2019*



VI. Geographic Distribution of Confirmed Leptospirosis Cases

Most of the confirmed leptospirosis cases were from **NCR** (16 or 37%) followed by **REGION V** (12 or 28%). A total of three (3) deaths were noted: two were from NCR (CFR 12.50%) and one from Region II (CFR 33.33%).

Table 3. Confirmed Leptospirosis Cases by Region (n=43)
Philippines, May 2019

Region	Cases	Deaths	CFR%
PHILIPPINES	43	3	6.98
I	2	0	0.00
II	3	1	33.33
IV-A	4	0	0.00
V	12	0	0.00
VI	5	0	0.00
VIII	1	0	0.00
NCR	16	2	12.50

*From period of January 1 to May 25, 2019

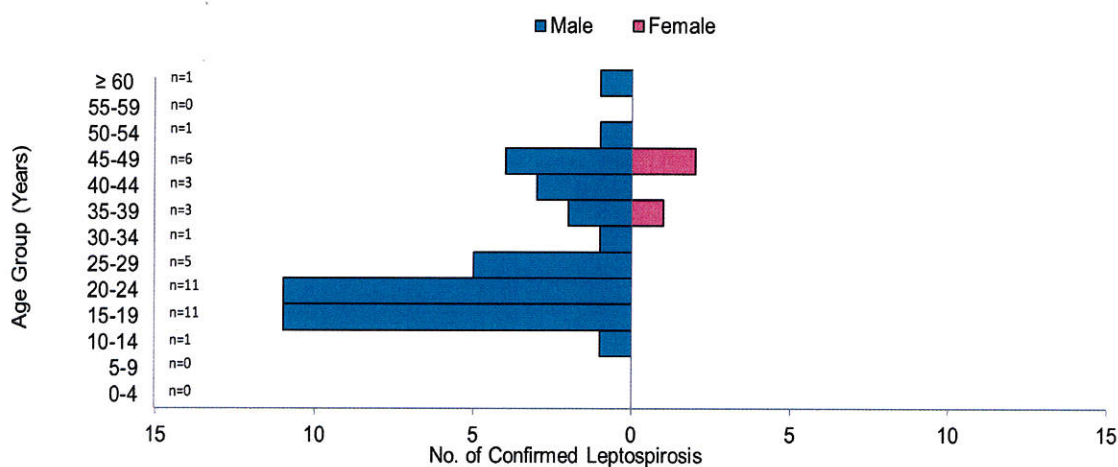
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VII. Sex and Age Group of Confirmed Leptospirosis Cases

Age of confirmed leptospirosis cases ranged from 13 years to 68 years (median = 24 years). Majority (40 or 93%) were male. Most (11 or 26%) of the cases belonged to the age group of 15-19 and 20-24 years old [Figure 5].

**Figure 5. Confirmed Leptospirosis Cases by Age Group and Sex (n=43)
Philippines, May 2019***



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Figures 6-22. Leptospirosis Alert and Epidemic Thresholds per Region as of May, 2019

Fig. 6 Reported Leptospirosis Cases by Morbidity Week
Region I, as of January 1-May 25, 2019 (n=14)

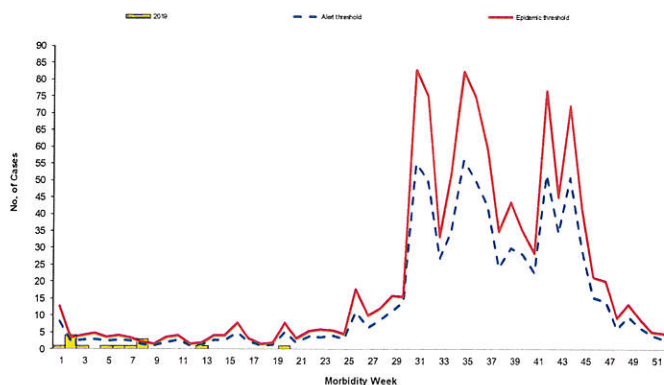


Fig. 7 Reported Leptospirosis Cases by Morbidity Week
Region II, as of January 1-May 25, 2019 (n=44)

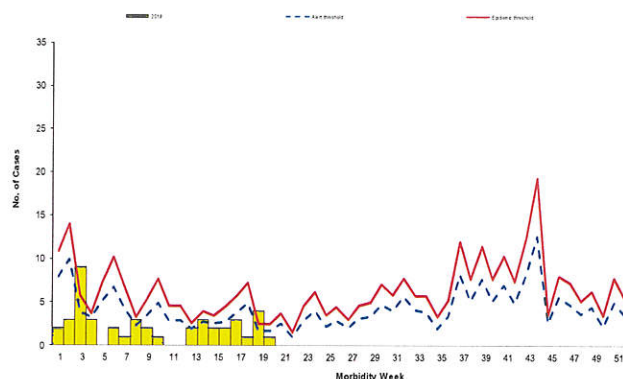


Fig. 8 Reported Leptospirosis Cases by Morbidity Week
Region III, as of January 1-May 25, 2019 (n=37)

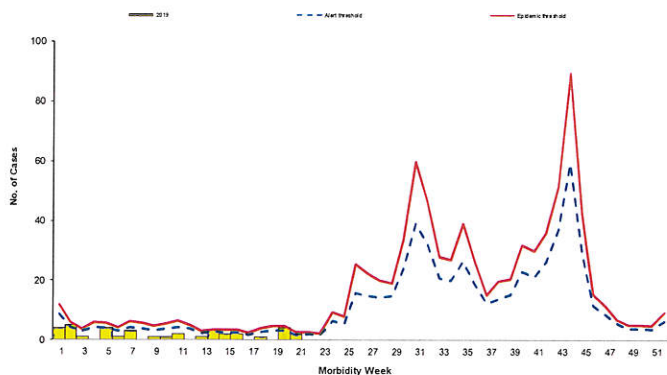


Fig. 9 Reported Leptospirosis Cases by Morbidity Week
Region IV-A, as of January 1-May 25, 2019 (n=33)

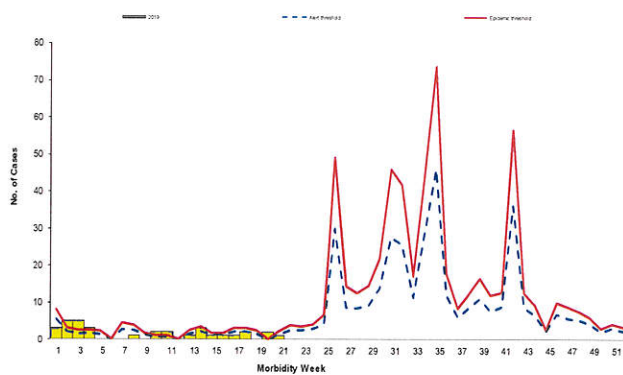


Fig. 10 Reported Leptospirosis Cases by Morbidity Week
Region MIMAROPA, as of January 1-May 25, 2019 (n=5)

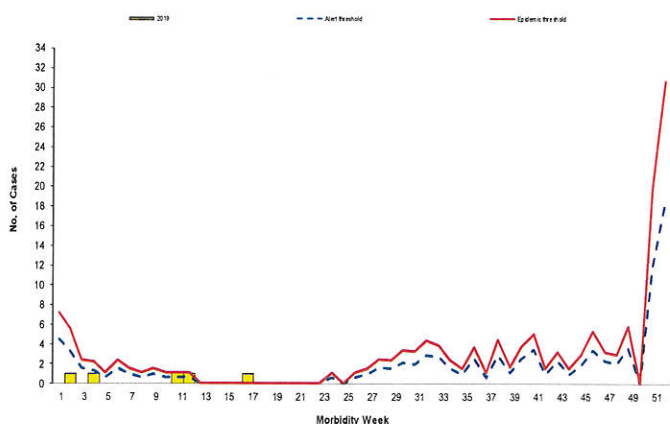
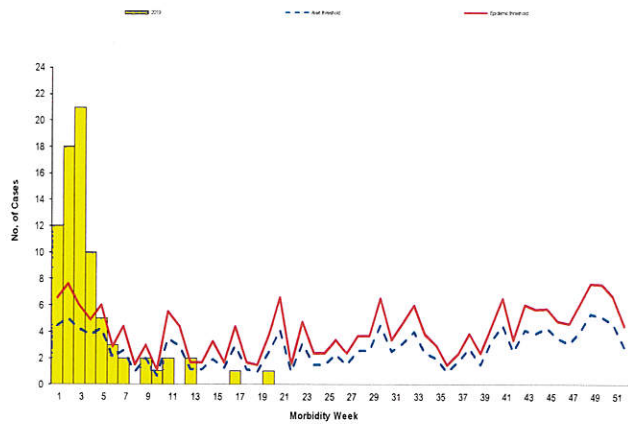


Fig. 11 Reported Leptospirosis Cases by Morbidity Week
Region V, as of January 1-May 25, 2019 (n=80)



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Figures 6-22. Leptospirosis Alert and Epidemic Thresholds per Region as of May, 2019

Fig. 12 Reported Leptospirosis Cases by Morbidity Week
Region VI, as of January 1-May 25, 2019 (n=61)

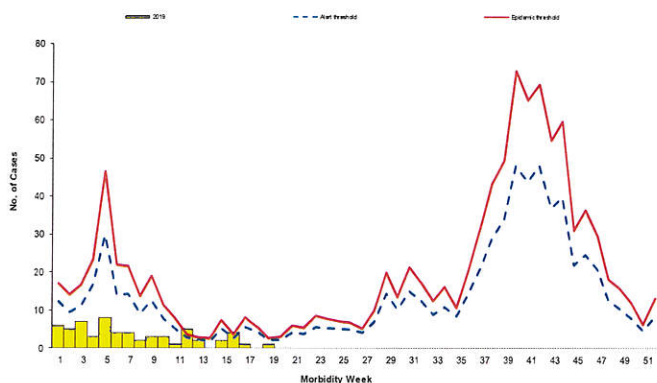


Fig. 13 Reported Leptospirosis Cases by Morbidity Week
Region VII, as of January 1-May 25, 2019 (n=14)

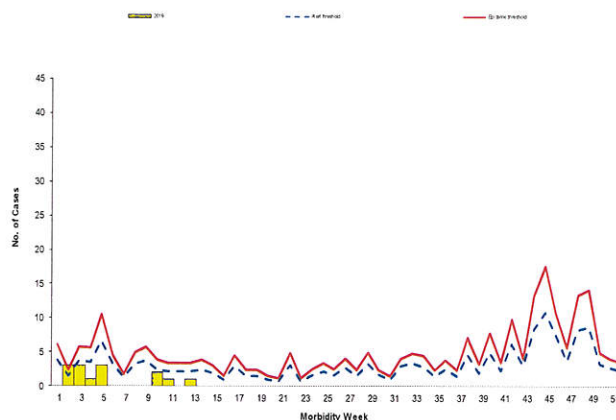


Fig. 14 Reported Leptospirosis Cases by Morbidity Week
Region VIII, as of January 1-May 25, 2019 (n=14)

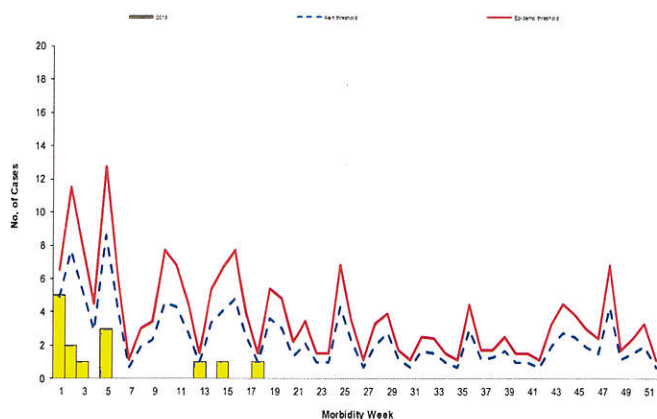


Fig. 15 Reported Leptospirosis Cases by Morbidity Week
Region IX, as of January 1-May 25, 2019 (n=12)

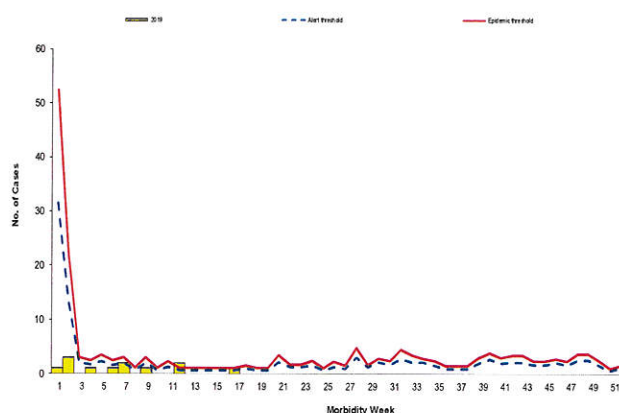


Fig. 16 Reported Leptospirosis Cases by Morbidity Week
Region X, as of January 1-May 25, 2019 (n=9)

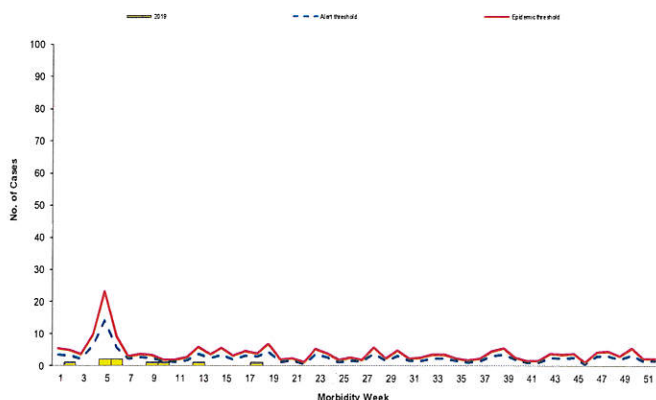
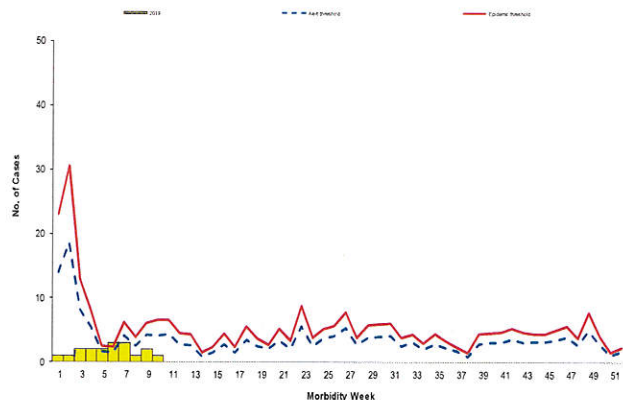


Fig. 17 Reported Leptospirosis Cases by Morbidity Week
Region XI, as of January 1-May 25, 2019 (n=18)



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Figures 6-22. Leptospirosis Alert and Epidemic Thresholds per Region as of May, 2019

Fig. 18 Reported Leptospirosis Cases by Morbidity Week
Region XII, as of January 1-May 25, 2019 (n=3)

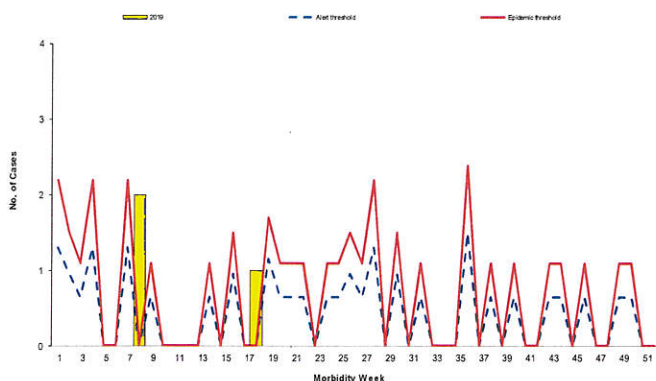


Fig. 19 Reported Leptospirosis Cases by Morbidity Week
Region ARMM, as of January 1-May 25, 2019 (n=2)

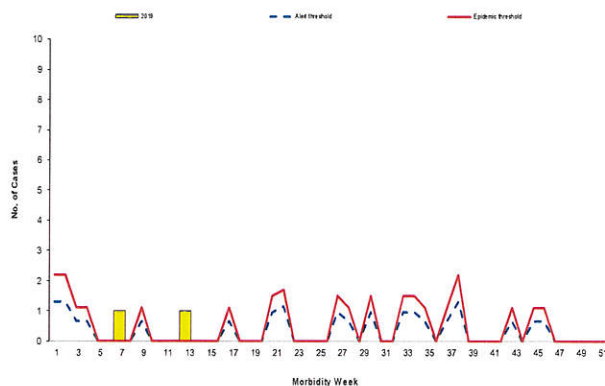


Fig. 20 Reported Leptospirosis Cases by Morbidity Week
Region CAR, as of January 1-May 25, 2019 (n=9)

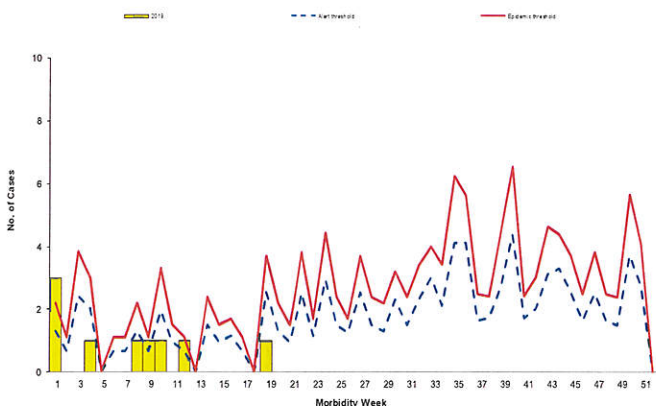


Fig. 21 Reported Leptospirosis Cases by Morbidity Week
Region CARAGA, as of January 1-May 25, 2019 (n=9)

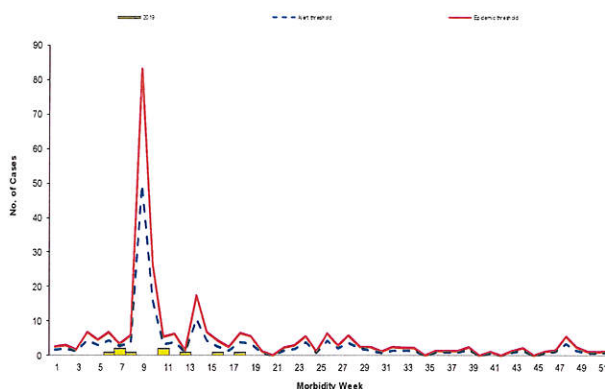
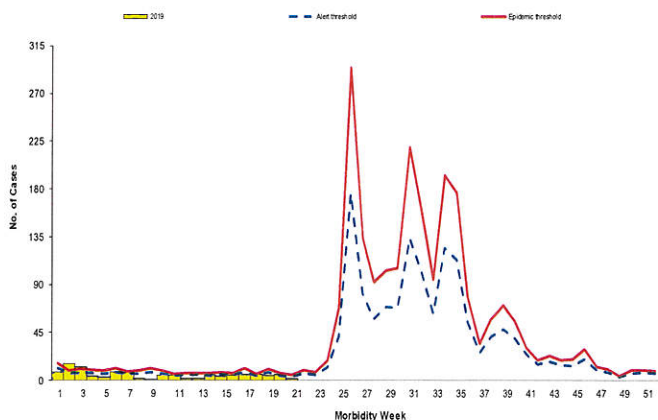


Fig. 22 Reported Leptospirosis Cases by Morbidity Week
Region NCR, as of January 1-May 25, 2019 (n=116)



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**Annex A. Reported Leptospirosis Cases by Region of DRU and Name of DRUs
Philippines, as of May 25, 2019 (N=480)**

REGION OF DRU	NAME OF DISEASE REPORTING UNIT	Total
I	ILOCOS TRAINING AND REGIONAL MEDICAL CENTER	2
	PANGASINAN PROVINCIAL HOSPITAL	4
	REGION I MEDICAL CENTER	5
	01 Total	11
II	CAGAYAN VALLEY MEDICAL CENTER	37
	ECHAGUE DISTRICT HOSPITAL	1
	GOV. FAUSTINO N. DY SR. MEMORIAL HOSP.	1
	QUIRINO PROVINCIAL HOSPITAL	1
	REGION II TRAUMA AND MEDICAL CENTER	1
	SOUTHERN ISABELA GENERAL HOSPITAL	1
	SOUTHERN ISABELA MEDICAL CENTER	2
III	ST. PAUL HOSPITAL	1
	02 Total	45
	BATAAN GENERAL HOSPITAL AND MEDICAL CENTER	5
	BULACAN MEDICAL CENTER	3
	CANDELARIA DISTRICT HOSPITAL	1
	PAULINO J. GARCIA MEMORIAL RESEARCH AND MEDICAL CEN	8
	JOSE B. LINGAD MEMORIAL HOSPITAL	3
	M.V. GALLEGO CABANATUAN CITY GEN. HOSP	1
	PANIQUEI GENERAL HOSPITAL	3
	PREMIERE MEDICAL CENTER	1
	RAYOS-VALENTIN HOSPITAL	1
	SAN MIGUEL DISTRICT HOSPITAL	2
	STO. DOMINGO DISTRICT HOSPITAL	1
	TARLAC PROVINCIAL HOSPITAL	3
IV-A	V.L. MAKABALI MEMORIAL HOSPITAL, INC.	2
	03 Total	34
	ANGONO GENERAL HOSPITAL	1
	BATANGAS HEALTH CARE HOSPITAL (Jesus of Nazareth)	1
	CLINICA ANTIPOLLO HOSPITAL AND WELLNESS CENTER INC.	1
	EMILIO AGUINALDO COLLEGE MEDICAL CENTER	1
	GEN. EMILIO AGUINALDO MEMORIAL HOSPITAL	1
	MAJAYJAY MEDICARE HOSPITAL	1
	N. L. VILLA MEMORIAL MEDICAL CENTER	1
	OSPITAL NG CALACA	1
MIMAROPA	RPHS ANTIPOLLO ANNEX 2	1
	UPH- DR. JOSE G. TAMAYO MEDICAL CENTER	1
	04A Total	10
V	CUYO DISTRICT HOSPITAL	1
	MA. ESTRELLA GENERAL HOSPITAL	2
	OCCIDENTAL MINDORO PROVINCIAL HOSPITAL	1
	MIMAROPA Total	4
	BICOL MEDICAL CENTER	46
	BICOL REGIONAL TRAINING AND TEACHING HOSP.	19
	CAMARINES NORTE PROVINCIAL HOSPITAL	1
	DR. FERNANDO B. DURAN, SR. MEMORIAL HOSP.	2
VI	EASTERN BICOL MEDICAL CENTER	3
	NAGA IMAGING CENTER COOPERATIVE DOCTORS HOSPITAL	1
	STA. MARIA JOSEFA FOUNDATION HOSPITAL	5
	USI-MOTHER SETON HOSPITAL	1
	05 Total	78
	ALFREDO MARAÑON SR. MEMORIAL HOSPITAL	2
	ANGEL SALAZAR MEMORIAL GENERAL HOSPITAL	1
VI	BACOLOD ADVENTIST MEDICAL CENTER	1
	CADIZ DISTRICT HOSPITAL	1
	CAPIZ DOCTORS' HOSPITAL, INC.	1
	CAPIZ EMMANUEL HOSPITAL, INC.	1
	CORAZON LOCSIN MONTELIBANO MEMORIAL REGIONAL HOSP.	26
	DR. CATALINO GALLEGO NAVA PROVINCIAL HOSPITAL	3
	HOLY MOTHER OF MERCY HOSPITAL	1
	ILOILO PROVINCIAL HOSPITAL	2
	RAMON TABIANA MEMORIAL DISTRICT HOSPITAL	2
	ROXAS MEMORIAL PROVINCIAL HOSPITAL	1
	ST. ANTHONY COLLEGE HOSPITAL	1
	ST. PAUL'S HOSPITAL	2
	TERESITA L. JALANDONI PROVINCIAL HOSP.	8
	THE MEDICAL CITY ILOILO	1
	WEST VISAYAS STATE UNIVERSITY MEDICAL CTR.	6
	WESTERN VISAYAS MEDICAL CENTER	1
	06 Total	61

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**Annex A. Reported Leptospirosis Cases by Region of DRU and Name of DRUs
 Philippines, as of May 25, 2019 (N=480) (continuation)**

REGION OF DRU	NAME OF DISEASE REPORTING UNIT	Total
VII	ADVENTIST HOSPITAL- CEBU	1
	CHONG HUA HOSPITAL	2
	GOV. CELESTINO GALLARES MEMORIAL HOSPITAL	7
	NEGROS ORIENTAL PROVINCIAL HOSP.	1
	VICENTE SOTTO MEMORIAL MEDICAL CENTER	2
07 Total		13
VIII	DIVINE WORD HOSPITAL	5
	EASTERN VISAYAS REGIONAL MEDICAL CTR.	1
	NORTHERN SAMAR PROVINCIAL HOSPITAL	4
	ORMOC DISTRICT HOSPITAL	2
	REMEDIOS TRINIDAD ROMUALDEZ HOSPITAL	1
08 Total		13
IX	CIUDAD MEDICAL ZAMBOANGA	3
	DR. HENRY M. DE VILLA MEMO. HOSP.	1
	MARGOSATUBIG REGIONAL HOSPITAL	1
	WEST METRO MEDICAL CENTER	1
	ZAMBOANGA CITY MEDICAL CENTER	7
	ZAMBOANGA DOCTOR'S HOSPITAL, INC.	1
09 Total		14
X	ADVENTIST MEDICAL CENTER-ILIGAN	1
	BUKIDNON PROVINCIAL HOSPITAL MARAMAG	1
	CAGAYAN DE ORO POLYMEDIC GENERAL HOSP.	1
	E and R HOSPITAL AND PHARMACY	1
	MADONNA AND CHILD HOSPITAL	2
	MALAYBALAY POLYMEDIC GENERAL HOSPITAL	1
	NORTHERN MINDANAO MEDICAL CENTER	2
10 Total		9
XI	DAVAO REGIONAL HOSPITAL	14
	ERN PHILIPPINES MEDICAL CENTER (former DAVAO MEDICAL CE	6
11 Total		20
XII	LANDERO CLINIC AND HOSPITAL	1
	SOCARGEN COUNTY HOSPITAL	1
	ST. LOUIS MEDICAL CLINIC AND HOSPITAL	1
12 Total		3
CAR	BAGUIO GENERAL HOSPITAL AND MEDICAL CENTER	8
	FAR NORTH LUZON GEN. HOSP. AND TRAINING CENTER	1
	KALINGA PROVINCIAL HOSPITAL	1
	PINES CITY DOCTORS' HOSPITAL	1
CAR Total		11
CARAGA	ADELA SERRA TY MEMORIAL MEDICAL CENTER	2
	CARAGA REGIONAL HOSPITAL	4
	SURIGAO DEL NORTE PROVINCIAL HOSPITAL	1
CARAGA Total		7
NCR	AMANG RODRIGUEZ MEDICAL CENTER	8
	CARDINAL SANTOS MEDICAL CENTER	1
	DR. JOSE N. RODRIGUEZ MEMORIAL HOSP.	2
	EAST AVENUE MEDICAL CENTER	22
	GAT ANDRES BONIFACIO MEMORIAL MED. CTR.	3
	JOSE R. REYES MEMORIAL MEDICAL CTR.	8
	LAS PIÑAS GEN. HOSP. & SATELLITE TRAUMA CENTER	7
	MAKATI MEDICAL CENTER	1
	NATIONAL KIDNEY AND TRANSPLANT INSTITUTE	31
	NODADO GENERAL HOSPITAL CAMARIN	1
	OSPITAL NG MAKATI	8
	OSPITAL NG PARAÑAQUE	2
	PHILIPPINE CHILDREN'S MEDICAL CENTER	2
	QUEZON CITY GENERAL HOSPITAL	1
	QUIRINO MEMORIAL MEDICAL CENTER	10
	RIZAL MEDICAL CENTER	7
	SAN LAZARO HOSPITAL	12
	SAUYO HEALTH CENTER	1
	STA. ANA HOSPITAL (NEW)	3
	TONDO MEDICAL CENTER	12
	UP-PHILIPPINE GENERAL HOSPITAL	5
NCR Total		147
Grand Total		480

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