Introduction

Leptospirosis is a bacterial disease affecting both humans and animals. The early stages of the disease may include high fever, muscle pain, chills, redness in the eyes, abdominal pain, hemorrhages in skin and mucous membranes (including pulmonary bleeding), vomiting, diarrhea and rashes. Severe cases resulting in liver involvement, kidney failure, or brain involvement. Some cases may have yellowish body discoloration, dark-colored urine and light stools, low urine output, severe headache.

Caused by pathogenic *Leptospira* species bacteria, human infection occurs through direct contact with urine of infected animals or by contact with a urine-contaminated environment. Leptospires can gain entry through cuts and abrasions in the skin and through mucous membranes of the eyes, nose and mouth.

Leptospirosis has low case fatality rate. However, it increases with advancing age and may reach 20% or more in patients with jaundice and kidney damage (Weil's disease) who have not been treated with renal dialysis. Incubation period of the disease is 7-10 days.

Trend in the Philippines

A total of 406 suspect leptospirosis cases were reported nationwide from January 1 to August 1, 2015. This is 16.1% lower compared to the same time period last year (484).

*Fig. 1 Distribution of Suspect Leptospirosis Cases by Morbidity Week Philippines, as of August 1, 2015*

*NOTE: Case counts reported here do NOT represent the final number and are subject to change after inclusion of delayed reports and review of cases.*

A PDF file of this report is available at ncc.doh.gov.ph. For more inquiries, you may contact us on the following telephone number: (02) 651-7800 local 2930
Leptospirosis Cases

Morbidity Week 30 – July 26-August 1, 2015

Fig. 2 Suspect Leptospirosis Cases by Morbidity Week, Philippines, as of August 1, 2015
2015* vs 2014 (N=406)

Geographic Distribution

Most of the cases were from the following regions: NCR (20.9%), REGION II (14.5%), REGION VI (11.6%), REGION VIII (8.6%) and Region I (6.9%).

Fig. 3 Suspect Leptospirosis Cases by Region, Philippines, 2015 vs 2014

*NOTE: Case counts reported here do NOT represent the final number and are subject to change after inclusive of delayed reports and review of cases.
Fig. 4 Suspect Leptospirosis Cases as of January 1 to August 1, 2015

REGION | CASES
---|---
Region 1 | 28
Region 2 | 25
Region 3 | 59
Region 4A | 9
Region 4B | 3
Region 5 | 24
Region 6 | 47
Region 7 | 17
Region 8 | 35
Region 9 | 9
Region 10 | 21
Region 11 | 25
Region 12 | 3
ARMM | 2
CAR | 7
CARAGA | 7
NCR | 85
**TOTAL** | **406**

**LEGEND**

1 Dot = 1 Case

Fig. 5 Suspect Leptospirosis Deaths as of January 1 to August 1, 2015

REGION | CASES
---|---
Region 1 | 2
Region 2 | 2
Region 3 | 6
Region 4A | 2
Region 4B | 0
Region 5 | 3
Region 6 | 4
Region 7 | 0
Region 8 | 3
Region 9 | 1
Region 10 | 4
Region 11 | 2
Region 12 | 1
ARMM | 0
CAR | 1
CARAGA | 0
NCR | 6
**TOTAL** | **37**

**LEGEND**

1 Dot = 1 Case

*NOTE: Case counts reported here do NOT represent the final number and are subject to change after inclusion of delayed reports and review of cases.*
Profile of Cases

Ages of cases ranged from 0 to 78 years old (median = 29.0 years). Majority (89.9%) of cases were male. Most (36.5%) of the cases belonged to the age group of 25 to 39 years old (Fig. 4). There were 37 deaths (9.11%).

Fig. 6 Suspect Leptospirosis Cases by Agegroup and Sex
Philippines, as of August 1, 2015 (N=406)

Fig. 7 Suspect Leptospirosis Case Fatality Rate (CFR) by Age Group,
Philippines, as of August 1, 2015

*NOTE: Case counts reported here do NOT represent the final number and are subject to change after inclusive of delayed reports and review of cases.
### Table 1. Leptospirosis Cases & Deaths by Region

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td>28</td>
<td>28</td>
<td>0.0</td>
<td>2</td>
<td>7.14</td>
<td>8</td>
<td>28.57</td>
<td></td>
</tr>
<tr>
<td>II</td>
<td>25</td>
<td>59</td>
<td>-57.6</td>
<td>2</td>
<td>8.00</td>
<td>2</td>
<td>3.39</td>
<td></td>
</tr>
<tr>
<td>III</td>
<td>59</td>
<td>48</td>
<td>22.9</td>
<td>6</td>
<td>10.17</td>
<td>2</td>
<td>4.17</td>
<td></td>
</tr>
<tr>
<td>IV-A</td>
<td>9</td>
<td>7</td>
<td>28.6</td>
<td>2</td>
<td>22.22</td>
<td>1</td>
<td>14.29</td>
<td></td>
</tr>
<tr>
<td>IV-B</td>
<td>3</td>
<td>5</td>
<td>-40.0</td>
<td>0</td>
<td>0.00</td>
<td>0</td>
<td>0.00</td>
<td></td>
</tr>
<tr>
<td>V</td>
<td>24</td>
<td>16</td>
<td>50.0</td>
<td>3</td>
<td>12.50</td>
<td>1</td>
<td>6.25</td>
<td></td>
</tr>
<tr>
<td>VI</td>
<td>47</td>
<td>94</td>
<td>-50.0</td>
<td>4</td>
<td>8.51</td>
<td>3</td>
<td>3.19</td>
<td></td>
</tr>
<tr>
<td>VII</td>
<td>17</td>
<td>9</td>
<td>88.9</td>
<td>0</td>
<td>0.00</td>
<td>0</td>
<td>0.00</td>
<td></td>
</tr>
<tr>
<td>VIII</td>
<td>35</td>
<td>15</td>
<td>133.3</td>
<td>3</td>
<td>8.57</td>
<td>1</td>
<td>6.67</td>
<td></td>
</tr>
<tr>
<td>IX</td>
<td>9</td>
<td>25</td>
<td>-64.0</td>
<td>1</td>
<td>11.11</td>
<td>2</td>
<td>8.00</td>
<td></td>
</tr>
<tr>
<td>X</td>
<td>21</td>
<td>41</td>
<td>-48.8</td>
<td>4</td>
<td>19.05</td>
<td>1</td>
<td>2.44</td>
<td></td>
</tr>
<tr>
<td>XI</td>
<td>25</td>
<td>23</td>
<td>8.7</td>
<td>2</td>
<td>8.00</td>
<td>1</td>
<td>4.35</td>
<td></td>
</tr>
<tr>
<td>XII</td>
<td>3</td>
<td>2</td>
<td>50.0</td>
<td>1</td>
<td>33.33</td>
<td>0</td>
<td>0.00</td>
<td></td>
</tr>
<tr>
<td>ARMM</td>
<td>2</td>
<td>4</td>
<td>-200.0</td>
<td>0</td>
<td>0.00</td>
<td>0</td>
<td>0.00</td>
<td></td>
</tr>
<tr>
<td>CAR</td>
<td>7</td>
<td>9</td>
<td>-22.2</td>
<td>1</td>
<td>14.29</td>
<td>0</td>
<td>0.00</td>
<td></td>
</tr>
<tr>
<td>CARAGA</td>
<td>7</td>
<td>35</td>
<td>-80.0</td>
<td>0</td>
<td>0.00</td>
<td>3</td>
<td>8.57</td>
<td></td>
</tr>
<tr>
<td>NCR</td>
<td>85</td>
<td>64</td>
<td>32.8</td>
<td>6</td>
<td>7.06</td>
<td>5</td>
<td>7.81</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>406</td>
<td>484</td>
<td>-16.1</td>
<td>37</td>
<td>9.11</td>
<td>30</td>
<td>6.20</td>
<td></td>
</tr>
</tbody>
</table>

### Table 2. Weekly Leptospirosis Summary Report by Region

<table>
<thead>
<tr>
<th>Region</th>
<th>Morbidity Week 26</th>
<th>27</th>
<th>28</th>
<th>29</th>
<th>30th Morbidity Week 2015</th>
<th>2014</th>
<th>Cumulative Total 1st wk to 30th wk 2015</th>
<th>2014</th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>3</td>
<td>28</td>
<td>28</td>
</tr>
<tr>
<td>II</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>25</td>
<td>59</td>
</tr>
<tr>
<td>III</td>
<td>1</td>
<td>5</td>
<td>4</td>
<td>11</td>
<td>2</td>
<td>7</td>
<td>59</td>
<td>48</td>
</tr>
<tr>
<td>IV-A</td>
<td>1</td>
<td>0</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>9</td>
<td>7</td>
</tr>
<tr>
<td>IV-B</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>3</td>
<td>5</td>
</tr>
<tr>
<td>V</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>24</td>
<td>16</td>
</tr>
<tr>
<td>VI</td>
<td>2</td>
<td>2</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>5</td>
<td>47</td>
<td>94</td>
</tr>
<tr>
<td>VII</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>17</td>
<td>9</td>
</tr>
<tr>
<td>VIII</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>35</td>
<td>15</td>
</tr>
<tr>
<td>IX</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>9</td>
<td>25</td>
</tr>
<tr>
<td>X</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>4</td>
<td>21</td>
<td>41</td>
</tr>
<tr>
<td>XI</td>
<td>0</td>
<td>3</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>25</td>
<td>23</td>
</tr>
<tr>
<td>XII</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>ARMM</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>CAR</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>7</td>
<td>9</td>
</tr>
<tr>
<td>CARAGA</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>7</td>
<td>35</td>
</tr>
<tr>
<td>NCR</td>
<td>1</td>
<td>2</td>
<td>4</td>
<td>20</td>
<td>5</td>
<td>11</td>
<td>85</td>
<td>64</td>
</tr>
<tr>
<td>Total</td>
<td>11</td>
<td>15</td>
<td>14</td>
<td>33</td>
<td>8</td>
<td>43</td>
<td>406</td>
<td>484</td>
</tr>
</tbody>
</table>

*NOTE: Case counts reported here do NOT represent the final number and are subject to change after inclusion of delayed reports and review of cases.*
Leptospirosis Cases

Morbidity Week 30 – July 26-August 1, 2015

Epidemiology Bureau
Public Health Surveillance Division

Treatment
- Take antibiotics duly prescribed by a physician.
- Early recognition and treatment within 2 days of illness prevents complications of leptospirosis, so early consultation is advised.

Prevention and Control
- Avoid swimming or wading in potentially contaminated water or flood water.
- Use proper protection, like boots and gloves, when work requires exposure to contaminated water.
- Drain potentially contaminated water when possible.
- Control rodents in the household by using rat traps or rat poison and maintaining cleanliness in the house.

EDITORIAL BOARD

RIO L. MAGPANTAY, MD, PHSAE, CESO III
Director IV, Epidemiology Bureau

VITO G. ROQUE, JR., MD, PHSAE
Division Chief PHSB

Allan P. Ignacio
Statistician II

June Cantata B. Corpus, RN
Nurse III

Diana Maria L. Sadiosa, RN
National Data Manager
PIDS

Joysa D. Lorico, RN
National Data Manager
PIDS

Daisy Regina O. Pedron, RN
National Data Manager
PIDS