Trend

A total of 2,231 suspect measles cases were reported nationwide from January 1 to June 27, 2015. Of these, 595 (26.67%) were classified as laboratory confirmed (534) and epi-linked (61) cases (see Table 1). The number of confirmed measles cases decreased significantly in 2015 (97.49%) compared with last year (see Table 2).

Figure 3 shows the distribution of confirmed measles cases by morbidity month. The data includes laboratory confirmed and epi-linked confirmed measles cases.

Geographic distribution

The distribution of confirmed measles cases varied considerably among the regions (see Figure 2). Most of the confirmed cases came from Region XI (19.50%), Region IX (16.97%), Region X (10.25%) and CARAGA (10.25%).

Profile of cases

Fifty two percent of the confirmed measles cases were male. Majority of the confirmed cases belonged to children less than 9 months old (20.34%). Among the confirmed measles cases, 188 (32%) were vaccinated with measles containing vaccine, 341 (57%) were not vaccinated and 66 (11%) have unknown vaccination status. Two among the confirmed measles cases died (CFR=0.34).

<table>
<thead>
<tr>
<th>REGION</th>
<th>TARGET</th>
<th>REPORTED</th>
<th>LABORATORY CONFIRMED</th>
<th>EPI-LINKED CONFIRMED</th>
<th>MEASLES COMPATIBLE</th>
<th>LABORATORY CONFIRMED</th>
<th>EPI-LINKED CONFIRMED</th>
<th>DISCARDED AS NON-MEASLES/RUBELLA</th>
<th>PENDING CLASSIFICATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHL</td>
<td>2,035</td>
<td>2,231</td>
<td>534</td>
<td>61</td>
<td>829</td>
<td>101</td>
<td>0</td>
<td>678</td>
<td>28</td>
</tr>
</tbody>
</table>

A PDF file of this report is available at [http://nec.doh.gov.ph](http://nec.doh.gov.ph). For more inquiries, you may contact us on this telephone number (02) 651-7800 local 2930.
FIGURE 1. CONFIRMED* MEASLES ALERT AND EPIDEMIC THRESHOLD
PHILIPPINES, JANUARY 1 – JUNE 27, 2015 (n=595)

Confirmed* Measles cases = Laboratory confirmed + Epi-linked confirmed Measles

A PDF file of this report is available at http://nec.doh.gov.ph. For more inquiries, you may contact us on this telephone number (02) 651-7800 local 2930.
TABLE 2. CONFIRMED* MEASLES CASES AND DEATHS BY REGION
PHILIPPINES, 2014 vs. 2015**

<table>
<thead>
<tr>
<th>REGION</th>
<th>CASES 2015</th>
<th>CASES 2014</th>
<th>% CHANGE</th>
<th>DEATHS 2015</th>
<th>CFR (%)</th>
<th>DEATHS 2014</th>
<th>CFR (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>4</td>
<td>761</td>
<td>↓99.47</td>
<td>0</td>
<td>0.00</td>
<td>7</td>
<td>0.92</td>
</tr>
<tr>
<td>2</td>
<td>11</td>
<td>667</td>
<td>↓98.35</td>
<td>0</td>
<td>0.00</td>
<td>1</td>
<td>0.15</td>
</tr>
<tr>
<td>3</td>
<td>3</td>
<td>2,815</td>
<td>↓99.89</td>
<td>0</td>
<td>0.00</td>
<td>11</td>
<td>0.39</td>
</tr>
<tr>
<td>4A</td>
<td>9</td>
<td>4,818</td>
<td>↓99.81</td>
<td>0</td>
<td>0.00</td>
<td>36</td>
<td>0.75</td>
</tr>
<tr>
<td>4B</td>
<td>1</td>
<td>347</td>
<td>↓99.71</td>
<td>0</td>
<td>0.00</td>
<td>4</td>
<td>1.15</td>
</tr>
<tr>
<td>5</td>
<td>1</td>
<td>663</td>
<td>↓99.85</td>
<td>0</td>
<td>0.00</td>
<td>5</td>
<td>0.75</td>
</tr>
<tr>
<td>6</td>
<td>59</td>
<td>942</td>
<td>↓93.74</td>
<td>0</td>
<td>0.00</td>
<td>1</td>
<td>0.11</td>
</tr>
<tr>
<td>7</td>
<td>42</td>
<td>1,143</td>
<td>↓96.33</td>
<td>0</td>
<td>0.00</td>
<td>3</td>
<td>0.26</td>
</tr>
<tr>
<td>8</td>
<td>15</td>
<td>273</td>
<td>↓94.51</td>
<td>0</td>
<td>0.00</td>
<td>4</td>
<td>1.47</td>
</tr>
<tr>
<td>9</td>
<td>101</td>
<td>268</td>
<td>↓62.31</td>
<td>0</td>
<td>0.00</td>
<td>0</td>
<td>0.00</td>
</tr>
<tr>
<td>10</td>
<td>61</td>
<td>925</td>
<td>↓93.41</td>
<td>0</td>
<td>0.00</td>
<td>3</td>
<td>0.32</td>
</tr>
<tr>
<td>11</td>
<td>116</td>
<td>1,617</td>
<td>↓92.83</td>
<td>2</td>
<td>1.72</td>
<td>3</td>
<td>0.19</td>
</tr>
<tr>
<td>12</td>
<td>53</td>
<td>1,273</td>
<td>↓95.84</td>
<td>0</td>
<td>0.00</td>
<td>2</td>
<td>0.16</td>
</tr>
<tr>
<td>ARMM</td>
<td>6</td>
<td>439</td>
<td>↓98.63</td>
<td>0</td>
<td>0.00</td>
<td>3</td>
<td>0.68</td>
</tr>
<tr>
<td>CAR</td>
<td>36</td>
<td>213</td>
<td>↓83.10</td>
<td>0</td>
<td>0.00</td>
<td>0</td>
<td>0.00</td>
</tr>
<tr>
<td>CRG</td>
<td>61</td>
<td>756</td>
<td>↓91.93</td>
<td>0</td>
<td>0.00</td>
<td>2</td>
<td>0.26</td>
</tr>
<tr>
<td>NCR</td>
<td>16</td>
<td>5,823</td>
<td>↓99.73</td>
<td>0</td>
<td>0.00</td>
<td>32</td>
<td>0.55</td>
</tr>
<tr>
<td>PHL</td>
<td>595</td>
<td>23,743</td>
<td>↓97.49</td>
<td>2</td>
<td>0.34</td>
<td>117</td>
<td>0.49</td>
</tr>
</tbody>
</table>

2015** = as of June 27, 2015
Confirmed* Measles cases = Laboratory confirmed + Epi-linked confirmed Measles
FIGURE 3. CONFIRMED* MEASLES CASES BY REGION AND MONTH
PHILIPPINES. 2014 (n=23,743) VS. 2015** (n=595)

FIGURE 3.1.

FIGURE 3.2.

FIGURE 3.3.

FIGURE 3.4.

FIGURE 3.5.

FIGURE 3.6.

FIGURE 3.7.

FIGURE 3.8.

FIGURE 3.9.

FIGURE 3.10.

FIGURE 3.11.
2015** = as of June 27, 2015
Confirmed* Measles cases = Laboratory confirmed + Epi-linked confirmed Measles
FIGURE 4. IMMUNIZATION STATUS OF CONFIRMED* MEASLES CASES BY AGE GROUP
PHILIPPINES, JANUARY 1 – JUNE 27, 2015 (n=595)

FIGURE 4.1.

FIGURE 4.2.

FIGURE 4.3.

FIGURE 4.4.

FIGURE 4.5.

FIGURE 4.6.

FIGURE 4.7.

FIGURE 4.8.

FIGURE 4.9.

FIGURE 4.10.
Confirmed* Measles cases = Laboratory confirmed + Epi-linked confirmed Measles
FIGURE 5. MCV DOSE RECEIVED AMONG CONFIRMED* VACCINATED CASES BY AGE GROUP
PHILIPPINES, JANUARY 1 – JUNE 27, 2015 (n=188)

FIGURE 5.1. REGION I

FIGURE 5.2. REGION II

FIGURE 5.3. REGION III

FIGURE 5.4. REGION IVA

FIGURE 5.5. REGION IVB

FIGURE 5.6. REGION V

FIGURE 5.7. REGION VI

FIGURE 5.8. REGION VII

FIGURE 5.9. REGION VIII

FIGURE 5.10. REGION IX

A PDF file of this report is available at http://ncd-doh.gov.ph. For more inquiries, you may contact us on this telephone number (02) 651-7800 local 2930.
Confirmed* Measles cases = Laboratory confirmed + Epi-linked confirmed Measles
FIGURE 6. REASONS FOR NON-VACCINATION OF CONFIRMED* UNVACCINATED MEASLES CASES
PHILIPPINES, JANUARY 1 – JUNE 27, 2015 (n=341)

**Figure 6.1**

**REGION I**

- **Region I**
  - None specified: 0.0%
  - Other reasons: 0.0%
  - Not eligible for vaccination: 0.0%
  - Non vaccine available: 0.0%
  - No vaccine received: 0.0%
  - Mother was busy: 0.0%
  - Medical contraindication: 0.0%
  - Forgot the schedule: 0.0%
  - Fear of side effects: 0.0%
  - Child was sick: 0.0%
  - Against belt: 0.0%

**Figure 6.2**

**REGION II**

- **Region II**
  - None specified: 0.0%
  - Other reasons: 0.0%
  - Not eligible for vaccination: 0.0%
  - No vaccine available: 0.0%
  - No vaccine received: 0.0%
  - Mother was busy: 0.0%
  - Medical contraindication: 0.0%
  - Forgot the schedule: 0.0%
  - Fear of side effects: 0.0%
  - Child was sick: 0.0%
  - Against belt: 0.0%

**Figure 6.3**

**REGION III**

- **Region III**
  - None specified: 0.0%
  - Other reasons: 0.0%
  - Not eligible for vaccination: 0.0%
  - No vaccine available: 0.0%
  - No vaccine received: 0.0%
  - Mother was busy: 0.0%
  - Medical contraindication: 0.0%
  - Forgot the schedule: 0.0%
  - Fear of side effects: 0.0%
  - Child was sick: 0.0%
  - Against belt: 0.0%

**Figure 6.4**

**REGION IVA**

- **Region IVA**
  - None specified: 0.0%
  - Other reasons: 0.0%
  - Not eligible for vaccination: 0.0%
  - No vaccine available: 0.0%
  - No vaccine received: 0.0%
  - Mother was busy: 0.0%
  - Medical contraindication: 0.0%
  - Forgot the schedule: 0.0%
  - Fear of side effects: 0.0%
  - Child was sick: 0.0%
  - Against belt: 0.0%

**Figure 6.5**

**REGION IVB**

- **Region IVB**
  - None specified: 0.0%
  - Other reasons: 0.0%
  - Not eligible for vaccination: 0.0%
  - No vaccine available: 0.0%
  - No vaccine received: 0.0%
  - Mother was busy: 0.0%
  - Medical contraindication: 0.0%
  - Forgot the schedule: 0.0%
  - Fear of side effects: 0.0%
  - Child was sick: 0.0%
  - Against belt: 0.0%

**Figure 6.6**

**REGION V**

- **Region V**
  - None specified: 0.0%
  - Other reasons: 0.0%
  - Not eligible for vaccination: 0.0%
  - No vaccine available: 0.0%
  - No vaccine received: 0.0%
  - Mother was busy: 0.0%
  - Medical contraindication: 0.0%
  - Forgot the schedule: 0.0%
  - Fear of side effects: 0.0%
  - Child was sick: 0.0%
  - Against belt: 0.0%

**Figure 6.7**

**REGION VI**

- **Region VI**
  - None specified: 5.41%
  - Other reasons: 0.0%
  - Not eligible for vaccination: 0.0%
  - No vaccine available: 0.0%
  - No vaccine received: 0.0%
  - Mother was busy: 0.0%
  - Medical contraindication: 0.0%
  - Forgot the schedule: 0.0%
  - Fear of side effects: 0.0%
  - Child was sick: 0.0%
  - Against belt: 0.0%

**Figure 6.8**

**REGION VII**

- **Region VII**
  - None specified: 15.15%
  - Other reasons: 0.0%
  - Not eligible for vaccination: 0.0%
  - No vaccine available: 0.0%
  - No vaccine received: 0.0%
  - Mother was busy: 0.0%
  - Medical contraindication: 0.0%
  - Forgot the schedule: 0.0%
  - Fear of side effects: 0.0%
  - Child was sick: 0.0%
  - Against belt: 0.0%

**Figure 6.9**

**REGION VIII**

- **Region VIII**
  - None specified: 0.0%
  - Other reasons: 0.0%
  - Not eligible for vaccination: 0.0%
  - No vaccine available: 0.0%
  - No vaccine received: 0.0%
  - Mother was busy: 0.0%
  - Medical contraindication: 0.0%
  - Forgot the schedule: 0.0%
  - Fear of side effects: 0.0%
  - Child was sick: 0.0%
  - Against belt: 0.0%

**Figure 6.10**

**REGION IX**

- **Region IX**
  - None specified: 35.00%
  - Other reasons: 0.0%
  - Not eligible for vaccination: 0.0%
  - No vaccine available: 0.0%
  - No vaccine received: 0.0%
  - Mother was busy: 0.0%
  - Medical contraindication: 0.0%
  - Forgot the schedule: 0.0%
  - Fear of side effects: 0.0%
  - Child was sick: 0.0%
  - Against belt: 0.0%
Confirmed* Measles cases = Laboratory confirmed + Epi-linked confirmed Measles
Confirmed Measles cases = Laboratory confirmed + Epi-linked confirmed Measles
Confirmed* Measles cases = Laboratory confirmed + Epi-linked confirmed Measles
Measles Elimination in the Philippines

The goal for measles elimination in the Western Pacific Region was set in 2005. In September 2012, the Regional Committee for the Western Pacific Region encouraged its member states to undertake the challenges for Measles elimination.

The Department of Health through the Epidemiology Bureau take part in achieving this goal by closely monitoring the standard surveillance indicators to ensure that the Measles elimination goal will be attained and sustained. Currently, the Philippines has exceeded the low incidence target rate of <1/1million population (11.69/1,000,000 population), illustrating that the country needs to exert more efforts in attaining the elimination goal.

**TABLE 3. MEASLES SURVEILLANCE INDICATORS BY REGION**
**PHILIPPINES, JANUARY 1 – JUNE 27, 2015**

<table>
<thead>
<tr>
<th>REGION</th>
<th>MEASLES INCIDENCE RATE</th>
<th>BLOOD ADEQUACY RATE</th>
<th>SUSPECT MEASLES CASES ADEQUATELY INVESTIGATED</th>
<th>SUSPECT MEASLES REPORTING RATE</th>
<th>SUSPECT MEASLES NON-RUBELLA RATE</th>
<th>MEASLES COMPATIBLE %</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Target: &lt;1/1,000,000 Pop.</td>
<td>Target: ≥80%</td>
<td>Target: ≥80%</td>
<td>Target: ≥2/100,000 Pop.</td>
<td>Target: ≥2/100,000 Pop.</td>
<td>Target: &lt;10%</td>
</tr>
<tr>
<td>1</td>
<td>152.42</td>
<td>1.58</td>
<td>91</td>
<td>76</td>
<td>80</td>
<td>49</td>
</tr>
<tr>
<td>2</td>
<td>195.19</td>
<td>6.35</td>
<td>65</td>
<td>75</td>
<td>53</td>
<td>55</td>
</tr>
<tr>
<td>3</td>
<td>254.46</td>
<td>0.53</td>
<td>79</td>
<td>91</td>
<td>59</td>
<td>48</td>
</tr>
<tr>
<td>4A</td>
<td>337.15</td>
<td>1.22</td>
<td>72</td>
<td>66</td>
<td>33</td>
<td>29</td>
</tr>
<tr>
<td>4B</td>
<td>117.53</td>
<td>0.67</td>
<td>43</td>
<td>50</td>
<td>27</td>
<td>22</td>
</tr>
<tr>
<td>5</td>
<td>135.22</td>
<td>0.34</td>
<td>71</td>
<td>100</td>
<td>60</td>
<td>89</td>
</tr>
<tr>
<td>6</td>
<td>125.53</td>
<td>15.52</td>
<td>96</td>
<td>97</td>
<td>52</td>
<td>65</td>
</tr>
<tr>
<td>7</td>
<td>156.38</td>
<td>11.30</td>
<td>90</td>
<td>99</td>
<td>66</td>
<td>91</td>
</tr>
<tr>
<td>8</td>
<td>63.18</td>
<td>6.86</td>
<td>24</td>
<td>19</td>
<td>15</td>
<td>15</td>
</tr>
<tr>
<td>9</td>
<td>72.87</td>
<td>53.94</td>
<td>65</td>
<td>68</td>
<td>52</td>
<td>54</td>
</tr>
<tr>
<td>10</td>
<td>197.91</td>
<td>25.58</td>
<td>63</td>
<td>46</td>
<td>52</td>
<td>34</td>
</tr>
<tr>
<td>11</td>
<td>333.87</td>
<td>46.99</td>
<td>84</td>
<td>93</td>
<td>73</td>
<td>56</td>
</tr>
<tr>
<td>12</td>
<td>280.13</td>
<td>22.77</td>
<td>50</td>
<td>52</td>
<td>39</td>
<td>38</td>
</tr>
<tr>
<td>ARMN</td>
<td>126.76</td>
<td>3.41</td>
<td>46</td>
<td>43</td>
<td>33</td>
<td>34</td>
</tr>
<tr>
<td>CAR</td>
<td>122.88</td>
<td>40.85</td>
<td>96</td>
<td>92</td>
<td>86</td>
<td>63</td>
</tr>
<tr>
<td>CRG</td>
<td>292.86</td>
<td>46.58</td>
<td>78</td>
<td>82</td>
<td>70</td>
<td>32</td>
</tr>
<tr>
<td>NCR</td>
<td>456.60</td>
<td>2.47</td>
<td>71</td>
<td>68</td>
<td>41</td>
<td>16</td>
</tr>
<tr>
<td>PHL</td>
<td>287.73</td>
<td>11.69</td>
<td>71</td>
<td>70</td>
<td>48</td>
<td>44</td>
</tr>
</tbody>
</table>

2015* - Annualized rate

**Definition of Terms:**

*Laboratory confirmed measles case* – A suspect measles case with a positive laboratory test result for measles-specific IgM antibodies or other approved laboratory test method

*Laboratory confirmed rubella case* – A suspect measles case with a positive laboratory test result for rubella-specific IgM antibodies or other approved laboratory test method

*Clinically measles compatible case* – A case that meets the suspect case definition for measles but for which no adequate blood specimen was taken and which has not been linked epidemiologically to another case positive for measles IgM or another laboratory-confirmed communicable disease

*Epidemiologically-linked measles (or rubella) case* – A suspect measles case that has not been confirmed by laboratory but that is geographically AND temporally related (with dates of rash onset occurring between 7 and 21 days apart) to a laboratory-confirmed case or (in the event of an outbreak) to another epidemiologically confirmed measles case

*Discarded as non-measles/non-rubella* – A case that meets the clinical case definition for measles and discarded as non-measles/rubella case.

*Pending Classification* - Cases with blood specimen collected and pending laboratory results.

*Alert threshold* – Refers to the level of occurrence of disease that serves as an early warning for epidemics. An increase in the number of cases above the threshold level should trigger an investigation, epidemic preparedness and implement appropriate prevention and control measures.

*Epidemic threshold* – Refers to the level of occurrence of disease above which an urgent response is required. The threshold is specific to each disease and depends on the infectiousness, other determinants of transmission and local endemicity levels.