Situation Report 4
Dengue Outbreak

13 Aug 2019

Highlights

- 167,607 dengue cases, including 720 deaths, reported from 1 January to 27 July 2019: 97% higher than in 2018, in spite of a delayed rainy season (Figure 1).
- Case Fatality Rate (CFR) of 0.43% as of 27 July 2019 is lower than in the same time period in 2018 (0.54%), but still significantly higher than the regional average of 0.22% in the Western Pacific.
- The Philippines Department of Health (DOH) declared a National Dengue Epidemic on 6 August 2019, urging all regional DOH offices to step up dengue surveillance, case management and outbreak response, clean-up drives, and vector control in health facilities and communities, conduct Sabayang 4-O’Clock Habit Para sa Deng-Get Out focusing on search and destroy of mosquito breeding sites, and to enable LGUs to use their quick response funds to help address the epidemic.

Current Situation

Between 1 January to 27 July 2019, 167,607 dengue cases including 720 deaths were reported through the DOH routine surveillance system, with a CFR of 0.43% (Table 1).

With a median age of 12 years, the most affected age group among dengue cases is 5-9 years (23%). Similarly, the most affected age group among dengue deaths is 5-9 years (42%). The majority of dengue cases are male (52%), whereas the majority of dengue deaths are female (54%).

CFR is highest in regions XI (.58%), BARMM (.87%), and V (0.57%), whereas incidence is highest in regions VI, IV-A, XIII, IX, X.

Figure 1: Accumulative reported dengue cases*
Philippines, epidemiological week 1-30 2018 and 2019

Table 1: Cumulative Reported Dengue Cases by Region
January 1- July 27, 2019 vs January 1- July 27, 2018

<table>
<thead>
<tr>
<th>Region</th>
<th>Cases reported by Epidemiological week</th>
<th>Number of Death reported by Epidemiological week</th>
<th>CFR in Region</th>
<th>Total Cases</th>
<th>Total Deaths</th>
<th>CFR %</th>
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</thead>
<tbody>
<tr>
<td>Region XI</td>
<td>12,600</td>
<td>1,500</td>
<td></td>
<td>85,011</td>
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<td>720</td>
<td>0.43%</td>
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<td>421</td>
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<td>0.43%</td>
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<tr>
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<td>576</td>
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<td>720</td>
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Table 1: Cumulative Reported Dengue Cases by Region
January 1- July 27, 2019 vs January 1- July 27, 2018

- Accumulative cases of Dengue in the Philippines 2018-2019
- 2018: 85,011 cases, 464 deaths, CFR 0.54%
- 2019: 167,607 cases, 720 deaths, CFR 0.43%

Between 1 January 2019 - 27 July 2019
Response so far

Risk assessment

The overall risk at sub-national (Region V, BARMM, VI, VII) and at the national level is assessed to be high as dengue virus has the potential to cause epidemics resulting in high morbidity and mortality. With the rainy season intensifying, there is increased risk of more breeding sites for vector proliferation. Historic seasonal trends suggest more cases are expected.

The risk for the dengue outbreak in the Philippines to spread to other countries in the region is assessed low although some cases from travellers to the Philippines are expected but this is likely to be limited.

Dengue is endemic in the Philippines with seasonal peaks between July and September each year following the rains. With a delayed rainy season due to a weak El Niño likely to continue until August 2019, and the number of cases already 86% higher than in the same time period in 2018, the dengue caseload is expected to significantly rise.

When comparing annual dengue data since 2010 (Figure 3), 2018 was a peak year with the highest number of cases reported (216,190), whereas 2011 saw the lowest annually reported data (118,868). Mortality was highest in 2010 with a CFR of 0.59% and lowest in 2015 with a CFR of 0.30%.

Laboratory testing

As per 27 July 2019, 76,749 samples (46% of the total number of cases) were tested for dengue at the Research Institute for Tropical Medicine (RITM). Of all tested samples, 85% were confirmed. Of all laboratory confirmed dengue cases, the majority are dengue virus serotype (DENV) 3 (72%). (Figure 4)

Vaccination

Dengvaxia® is the only dengue vaccine currently licenced globally, but it is currently not licensed in the Philippines. WHO does not recommend dengue vaccination as a tool for outbreak response.
**Surveillance**

DOH Epidemiological Surveillance Units at municipal, provincial and regional level are proactively looking for clusters of dengue cases up to the barangay level, to launch specific response activities in line with identified needs. Regional Dengue Coordinators are submitting weekly dengue outbreak response reports to DOH to provide a comprehensive overview of all response actions and where needed, to mobilise additional resources. Line-lists of (suspected) dengue cases are collected.

**Case management**

Dengue causes flu-like illness, including a sudden high fever coming in separate waves, pain behind the eyes, muscle, joint and bone pain, severe headache, and a skin rash with red spots. Those with symptoms get ill between 4 to 7 days after a bite from an infected *Aedes* mosquito. The illness may progress to potentially fatal Severe Dengue, characterised by severe abdominal pain, vomiting, diarrhoea, convulsions, bruising, uncontrolled bleeding, and high fever which can last from 2 to 7 days. Complications can lead to circulatory system failure, shock, and death.

Although the majority of cases during the current outbreak are confirmed as DENV 3, all 4 DENV are present in the Philippines. Dengue subtypes act as different viruses: infection with one serotype does not protect against others, and sequentially infected by a different serotype put people at greater risk of developing Severe Dengue.

Health facilities have reactivated Dengue FastLanes, and CHDs are conducting training on existing dengue clinical management guidelines from 2012 for health workers in affected areas.

Although the current CFR is lower than for the same time period in 2018, it is considered high compared to the regional average of 0.22%. At the same time, the current incidence rate per 100,000 population is significantly higher than for the same period last year.

**Coordination**

A first National Health Cluster meeting was conducted on 17 July at the NDRRMC led by DOH, co-led by PRC. NDRRMC publishes regular SitReps on the dengue situation ([http://ndrrmc.gov.ph/](http://ndrrmc.gov.ph/)), outlining co-ordination efforts at regional level between DOH, Local Government Units (LGUs) other government agencies like the Department of Social Welfare and Development (DSWD), Office of Civil Defence (OCD), PRC, and lower level disaster risk reduction management offices. On 6 August, the Health Secretary presented to the NDRRMC the declaration of a national dengue epidemic.

**Vector Control**

The DOH is directing all health facilities to take part in search and destroy activities after every flag ceremony and conduct *Sabayang 4 O’clock Habit para Deng-Get Out* activity every Friday which also includes cleaning and draining containers of stagnant water and ensuring canals and streams are flowing.

**Risk Communication**

CHDs are intensifying public communication using DOH’s 4S strategy: Search and destroy mosquito breeding places, Self-protection through long sleeves and insect repellent, Seek early consultation on the first signs and symptoms, and Say yes to fogging. Targeted risk communication messages are in process of validation with health workers and specific target groups from the community, aimed at raising awareness and action.

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There is no specific treatment for dengue fever. **Patients should seek medical advice, rest and drink plenty of fluids.** Paracetamol can be taken to bring down fever and reduce joint pains. **Aspirin or ibuprofen should NOT be taken since they can increase the risk of bleeding.**

Dengue mosquitoes feed both indoors and outdoors during the daytime (during early morning hours and early evening hours) and thrive in areas with **standing clean water, including water tanks, containers and old tires.** Lack of regular water supply and garbage collection contribute to increased breeding.
awareness about dengue symptoms and warning signs of severe dengue, home-treatment of mild cases, and the importance of seeking immediate medical care if warning signs are presented.

**Response plan**

Regional, provincial and municipal health offices continue to:
- Provide daily dengue epidemiology analysis at barangay level
- Notify any cluster of dengue cases to DOH/EB for appropriate follow up.
- Advocate for community and school-based health education campaigns and clean-up drives
- Ensure supply of sufficient insecticides for vector control, in close collaboration with LGUs
- To support the declaration of the national dengue epidemic, the DOH has directed all regional health offices and the MOH-BARMM to activate their disaster risk reduction and management councils, lead in the 4 o’clock daily habit and ensure its institutionalization and implementation down to the community level, work with PhilHealth on the dengue benefit package and point-of-service enrolment, and further strengthen its information campaign including thru social media.

National-level DOH continues to:
- Coordinate response efforts with CHDs through the Task Force for Prevention, Control, and Response to Dengue Outbreak
- Sustained disease surveillance
- Sustained advocacy campaigns
- Hospital preparedness for surge capacity
- Lead the Health Cluster of NDRMMC
- Mobilization of human resources, logistics and funds to affected regions

WHO continues to support DOH with:
- Preparation of dengue outbreak response workshops to be conducted in September, for over 200 CHD staff to strengthen their coordination capacity with the provincial, municipal, and city health offices in dengue outbreak control.
- Development and dissemination of rapid advice on clinical management targeting clinicians, nurses, community health workers and the community.
- Updating of clinical management guidelines of dengue cases
- Development and dissemination of targeted risk communication messages for health workers and communities
- Dissemination of key guidelines and IEC materials to health partners
- Building clinical capacity in support of centres of excellence

**Partners’ engagement so far**

WHO is furthermore supporting with:
- Epidemiological analysis and rapid risk assessment
- Information sharing and coordination among health partners for mobilization of additional resources

The Philippine Red Cross (PRC):
- Mobilised 9 tents:
  - Balasan District Hospital, Iloilo: 2 medical tents, 20 beds each
  - Guimbal District Hospital, Iloilo: 1 tent, 20 beds
  - Sara District Hospital, Iloilo: 2 tents, 20 beds each
  - Tapaz District Hospital, Capiz: 1 tent, 20 beds
  - Bailan District Hospital: 1 tent, 20 beds
  - Aklan Provincial Hospital, Aklan: 1 tent, 20 beds
- Pagamutan ng Dasmarinas: 1 tent, 30 beds
  - Alerted local chapters to activate community-based volunteers (RC143) and Red Cross Action Team Volunteers (RCAT143) for health campaigns and clean-up drives.
  - Distributed 2,700 dengue prevention posters.

Plan International is printing and distributing 4S tarpaulins and conducting information dissemination and awareness campaigns in Northern and Western Samar, Eastern Samar, and Occidental Mindoro.

UNICEF is using social media channels for its dengue information dissemination and advocacy drive.