Highlights

- 229,736 dengue cases, including 958 deaths, reported from 1 January to 17 August 2019: 107% higher than in 2018 (Figure 1).
- 13,327 newly reported dengue cases between 11 and 17 August decreased from 17,137 cases in the preceding week, but 54% higher than in the same epidemiological week in 2018.
- Weekly Case Fatality Rate (CFR) of 0.30% in epidemiological week 33 (11-17 August 2019) is lower than in the same time period in 2018 (0.48%), but still significantly higher than the regional average of 0.22% in the Western Pacific.
- A National Dengue Epidemic was declared on 6 August 2019.
- 11 out of 17 regions exceed either the alert or the epidemic threshold.

Current Situation

Between 1 January and 17 August 2019, 229,736 dengue cases including 958 deaths were reported through the DOH routine surveillance system, with a CFR of 0.42% (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 (40%). The majority of dengue cases are male (52%), whereas the majority of dengue deaths are female (54%).

Between 11 and 17 August, 13,327 cases and 40 deaths were reported, compared to 17,137 cases and 36 deaths in the preceding week, but still 40% higher than in 2018. Similarly, the weekly CFR of 0.30% in epidemiological week 33 is lower than in the same time period in 2018 (0.48%) (Figure 1 and 2).

Please note that weekly cases are subject to change after inclusion of delayed reports.

Table 1: Cumulative Reported Dengue Cases per Region
Philippines, epidemiological week 1-33 2018 and 2019

<table>
<thead>
<tr>
<th>Region</th>
<th>January 1 to August 17, 2019</th>
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</table>

Figure 1: Weekly reported dengue cases in #
Philippines, epidemiological week 1-33 2018 and 2019

Figure 2: Weekly dengue Case Fatality Rate (CFR) in %
Philippines, epidemiological week 29-33 2018 and 2019
Response so far

Risk assessment

The overall risk at the national level continues to be high in view of the large number of cases and high 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. At the same time, a sharp increase in cases is being observed in neighbouring countries like Cambodia, China, Lao PDR, Malaysia, Singapore and Vietnam, as well as globally with large outbreaks reported in Bangladesh and Honduras (Central America).

Laboratory testing

As per 17 August 2019, 111,362 samples (49% of the total number of cases) were tested for dengue, of which 1% at the Research Institute for Tropical Medicine (RITM) and the remainder through Rapid Diagnostic Tests (RDT). Of all tested samples, 84% were confirmed. Of all laboratory confirmed dengue cases, the majority are dengue virus serotype (DENV) 3 (69%).

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 has established Enhanced Dengue Surveillance as part of the epidemic response, which besides weekly disease surveillance on the number of cases and deaths and the laboratory results, includes entomological surveillance through larval surveys (% of houses infested with larvae and/or pupae). DOH hospitals are also submitting monthly death review reports. Furthermore, Regional Dengue Coordinators are submitting weekly dengue outbreak response reports to provide a comprehensive overview of all response actions, and a weekly inventory of dengue supplies, commodities and manpower.

Case management

About 75% of people infected with dengue show no symptoms, but can still infect others. Those with symptoms can be divided into 3 groups:

1. **Dengue without warning signs** (2-7 days fever with pain behind the eyes, muscle, joint and bone pain, severe headache, diarrhea, vomiting and a skin rash with red spots). Symptoms are very similar with other diseases (such as measles)

2. **Dengue with warning signs** (2-7 days fever with abdominal pain or tenderness, persistent vomiting, clinical signs of fluid accumulation, mucosal bleeding, lethargy)

3. **Severe dengue** (severe plasma leakage leading to shock, fluid accumulation with respiratory distress; severe bleeding, severe organ impairment)

DOH distinguishes between 3 groups of patients:

A. **Patients who may be sent home**
   - Suspected dengue patients without warning signs. These patients should be provided with oral rehydration solutions and paracetamol.
   - It is crucial that these patients are aware they need to monitor themselves routinely dengue warning signs until they are out of the critical period (approximately after 6 days of illness).
B. Patients who should be referred for in-hospital management

- Patients with warning signs (e.g. Abdominal pain, Mucosal bleeding)
- Co-existing conditions that may make dengue or its management more complicated, such as pregnancy, infancy and old age, obesity, diabetes mellitus, renal failure, chronic hemolytic diseases, etc.
- Social circumstances such as living alone or living far from health facility or without a reliable means of transport.

C. Patients with Severe Dengue Requiring Emergency Treatment and Urgent Referral

High mortality is often the result of lack of monitoring of warning signs due to lack of (adequately trained) health workers.

Monitoring

DOH staff are monitoring the effective implementation of dengue outbreak response measures in line with the National Dengue Epidemic memorandum through a series of checklists prepared for regional-level DOH offices, hospitals, RHU, LGUs, day care centres, schools, communities and households.

Coordination

DOH:

- Activated the Incident Command System (ICS) to streamline the dengue outbreak response:
- Issued #2019-0315 National Dengue Epidemic 2 August 2019
- Issued #2019-0316 Advisory on the Implementation of Search and Destroy of Mosquitoes’ Breeding Places Activities (Sabayang 4 O’clock Habit para Deng-Get Out) in Health Facilities 8 August 2019
- Issued #2019-0317 Guidelines in the Management of Surge Capacity during Dengue Epidemic 2 August 2019
- Organised Inter-Agency Committee on Environmental Health (IACEH) meeting on the National Dengue Epidemic on 29 August 2019
- Intensified health promotion and advocacies on Enhanced 4S Strategy (Search and destroy breeding sites, Self-protection, Seek early consultation and Say yes to fogging during outbreaks)
- Prepositioned and distributed commodities needed to Local Government Units
- Deployed Human Resources for Health
- Dengue case investigations and vector surveillance and control
- Provision of blood supply

National Disaster Risk Reduction and Management Council (NDRRMC):

- Issued Memorandum Circular #MC01-2019 Enjoining All Member Agencies to Support the Nationwide Dengue Epidemic Response 6 August 2019
- Issued 15 situation reports outlining actions carried out by regional and provincial level Disaster Risk Reduction and Management Councils.
- Conducted a full council emergency meeting on 6 August 2019 to coordinate response actions among all relevant government agencies (Education, Social Welfare and Development, Armed Forces, Public Information, Interior and Local Government, Environment and National Resources, and Public Works and Highways) and the Philippine Red Cross (PRC)

Vector Control

Dengue mosquitoes breed in household containers such as used for domestic water storage or decorative plants, as well as rain-filled habitats (used tyres, discarded containers, blocked gutters and buildings under construction). Typically, dengue mosquitoes do not fly far. The majority remain within 100 metres of where they breed, feeding almost entirely on humans mainly during daylight hours both indoors and outdoors.
Vector control should therefore prioritise the elimination of container habitats through frequently emptying and cleaning them or the use of insecticides either by biological control agents, killing adult mosquitoes using insecticides, or by combinations of these methods.

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.

WHO encourages proper solid waste disposal and improved water storage practices, including covering containers to prevent access by egg-laying female mosquitoes through community-based programmes.

**Risk Communication**

DOH has distributed the below materials in tagalog throughout the country. More targeted risk communication messages for health workers and community are being printed and will be shared soon.
Partners’ engagement so far

WHO:
- Epidemiological analysis and risk assessment
- Information sharing and coordination among health partners for mobilization of additional resources

Plan International
- Conducted dengue prevention and control orientation for Barangay Captains and Barangay Health Workers in Tarangnan, West Samar
- Supported dengue awareness campaigns in 72 barangays through distribution of IEC materials in North Samar
- Referral of severe cases to Tacloban Hospital in West Samar
- Provision of larvicide to RHUs in East Samar
- Support LGUs and RHUs in East, North, and West Samar, Masbate and Occidental Mindoro with school-based activities (clean up drives, handwashing promotion), and community-based health education campaigns through home visits.

Community and Family Services International (CFSI):
- Dissemination of information and blood donation to the Medical Center in Marawi

UNICEF
- Dissemination of information through social media

PRC
- Currently supporting 8 hospitals with 10 air-conditioned tents in Iloilo (Balasan, Sara, and Guimbal District Hospitals), Capiz (Tapaz and Bailan District Hospitals), Cavite (Aklan Provincial Hospital and Pagamutang Bayan ng Dasmariñas), and Iligan (Gregorio Lluch Memorial Hospital), that serve as Dengue Emergency Medical Units treating 2,526 patients as of 29 August, mostly children aged eight months old to 12 years old.
- Mobilising volunteers for health campaigns and clean-up drives.
- Distributed 2,700 dengue prevention posters.

IFRC
- To support PRC, the International Federation of Red Cross and Red Crescent Societies (IFRC) released 7.2 million Philippine pesos from its Disaster Relief Emergency Fund.
Response plan

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

DOH is requesting health partners for support with:
- NS1 rapid diagnostic test kits
- Tents for patient ward extensions
- Information campaign and advocacy
- Support with monitoring using the checklists
- Human resources

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

WHO continues to support DOH with:
- Preparation of dengue outbreak response workshops to be conducted in October, 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 targeted risk communication messages for health workers and communities
- Dissemination of key guidelines and IEC materials to health partners