

### **Dengue Situation Update**

#### 25 March 2014

Regional dengue activity is variable. Australia, Malaysia and Singapore have been experiencing a greater number of reported cases in 2014 compared to 2013, for the same time period. The recent trend continued to decrease in Cambodia, Lao PDR, New Caledonia, Philippines and Viet Nam.

**Malaysia** is experiencing an outbreak of dengue. Dengue activity in 2014 is more than 4 times higher than 2013, for the same time period.

**Singapore** is experiencing an increased level of dengue activity. Dengue activity in 2014 is 1.2 times higher than 2013, for the same time period.

#### **Dengue virus infection in the Pacific Region**

High level of dengue activity is being observed in Fiji, New Caledonia and French Polynesia.

In Fiji, there are over 15,000 suspected dengue cases and a total of 12 confirmed dengue deaths in which one was a health worker. Majority of the cases were from the Central division, however there was an increasing number of cases being observed in the Western and Northern division. DENV-3 has been isolated. The number of cases is still expected to continue to increase. WHO, Australian Aid program (Fiji Health Sector Support Program), Fiji Red Cross, IFRC, US CDC, QUT (WHO CC Brisbane), UNICEF and SPC have provided technical and financial support to assist in the confirmation and response to the outbreak. This includes, the provision by WHO of dengue test kits. MOH are responding to the situation and has issued a National Dengue Action Plan with focus on strengthening dengue surveillance, dengue clinical management, dengue laboratory reporting and management, strengthen public health response, accordination and logistics for outbreak and improve communication.

In New Caledonia, as of 19 Mar 2014, there have been 122 cases of dengue since September 2013: 24 cases in 2013, 16 cases in January, 58 cases in February and 24 cases in March. Given the high level of activity in the region and the increasing cases of zika virus infection, arboviral surveillance and public health response measures have been reviewed and strengthened. DENV-3 has been isolated in addition to DENV-1 (isolated in an imported case) from cases occurring in New Caledonia.

In French Polynesia, the dengue situation appears to be improving with a decline in cases reported each week after seeing an increasing level of dengue since mid-July 2013. As of 14 Mar 2014, the total number of cases is 1,811 and there has been one death. Both dengue serotype-1 and serotype-3 were isolated.

Dengue virus serotype 3 (DENV-3), to which a large proportion of the population of the Pacific Islands is likely to be susceptible has been recently isolated in the Region and is now co-circulating with serotype 1 (DENV-1). Dengue virus serotype 3 has recently reemerged in several countries and territories in the South Pacific after nearly 20 years. WHO is closely monitoring the situation in the Region.

#### Zika virus infection in the Pacific region

In French Polynesia, there were 8,600 suspected cases of zika virus infection reported by the health professionals sentinel network since early October 2013. Since late October, there were 301 newly confirmed cases. All islands of French Polynesia have been affected, and in all islands, the epidemic seems to have entered a phase of decline.

In New Caledonia, the Department of Health and Social Affairs detected the first indigenous case of zika virus infection on 19 Jan 2014. Since then, indigenous transmission has been on the rise in New Caledonia. As of 18 Mar, there have been 276 confirmed cases of zika virus since 25 November 2013. Of these, 244/276 (88%) were locally transmitted cases and 32/276 (11.6%) imported from French Polynesia.

In Cook Islands, as of 16 March 2014 there have been 197 cases of dengue-like illness. Cases presented with mild illness with no hospitalization, compatible with zika virus infection. Among specimens sent to French Polynesia for serotyping, a total of 54 specimens were so far tested positive for zika virus, supporting that this is a zika virus outbreak.

Zika virus infection is usually a mild disease; no hospitalizations directly related to acute infection have been reported. However, recently, a more severe single case of zika infection complicated by dengue co-infection has been reported recently in French Polynesia (http://www.eurosurveillance.org/ViewArticle.aspx?ArticleId=20720). Hence, disease severity and clinical presentation in zika infections need to be monitored closely; further, the results of studies examining the impact of underlying dengue infection for zika clinical disease severity need to be considered for assessing the overall public health risk of zika infection.

Current public health surveillance and response measures aimed at arboviruses in New Caledonia were reviewed and strengthened. Surveillance and response capacities are strong and at this stage, WHO assistance has not been requested. WHO continues to monitor the situation closely.

Table. Reported number of dengue cases in 2014 and 2013 (for the same time period), by country.\* NA: Not applicable.

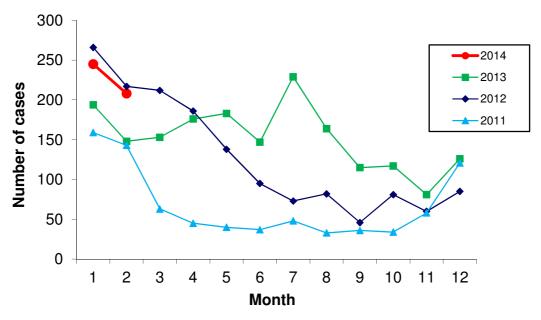
	Recent trend**	No. reported cases per latest reporting period (week (w) or month (m))	Reporting Period	No. reported cases per same reporting period in 2013 (week (w) or	Cumulative No. reported cases (deaths)		2014 /2013 ratio
		month (m))		month (m))	2014	2013	
Australia***	<b>\</b>	207/m	February	148/m	455 (NA)	342 (NA)	1.3
Cambodia	<b>V</b>	8/w	4 – 11 Mar	118/w	152 (1)	1131 (4)	0.1
Lao PDR	<b>V</b>	33/w	7 – 14 Mar	131/w	250 (0)	1534 (3)	0.2
Malaysia	<b>↑</b>	1902/w	9 – 15 Mar	461/w	21967 (53)	5 221 (14)	4.2
Philippines	<b>V</b>	71/w	up to 1 Mar	2 325/w	11019 (40)	23355 (98)	0.5
Singapore	<b>1</b>	225/w	9 - 15 Mar	308/w	3347 (NA)	2 813 (NA)	1.2
Viet Nam	Ψ	2373/m	January	4962/m	2373 (1)	4962 (7)	0.5
New Caledonia	<b>↑</b>	10/w	up to 21 Mar	706/w	106 (NA)	5 311 (NA)	0.02

<sup>\*</sup>Dengue reporting systems vary by country and any change in the surveillance system over time is not reflected in the above figures. Number of reported cases listed for 2014 and 2013 are for the same time period for each year.

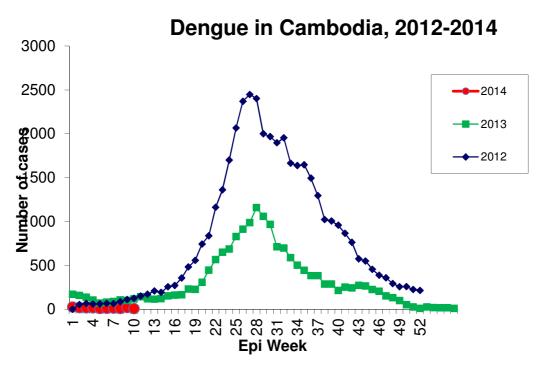
<sup>\*\*</sup>Recent trend is based on the 3 week moving average for countries reporting by week and monthly comparisons for the last complete month for countries reporting by month.

<sup>\*\*\*</sup>Australia: Aedes aegypti and Aedes albopictus are present only in Northern Queensland and Torres Strait Islands.

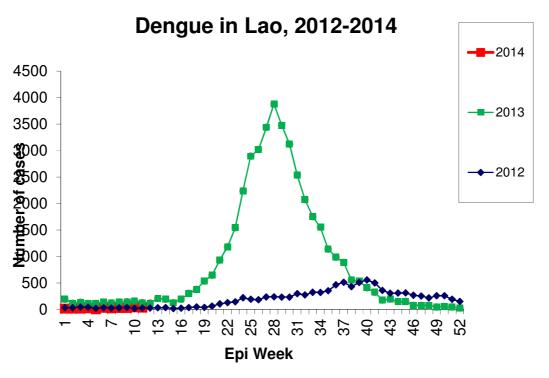
## Dengue in Australia, 2011-14



Australia up to February 2014 (Source: Dept of Health)

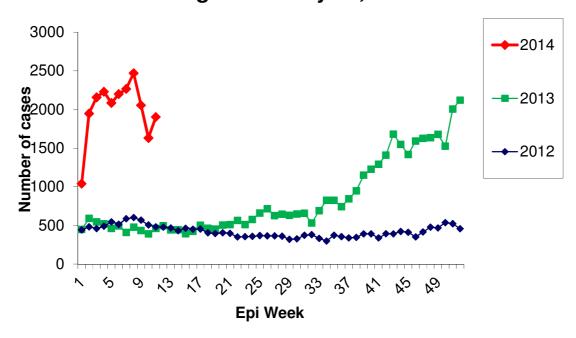


Cambodia up to 11 March 2014 (Source: Ministry of Health)



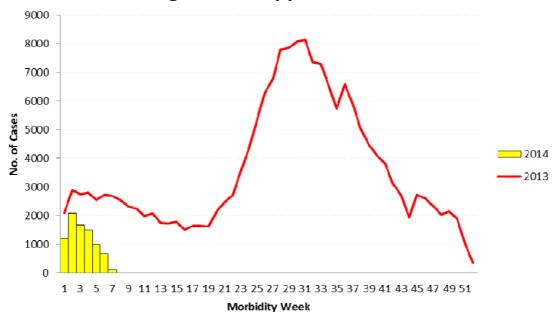
Lao PDR up to 14 March 2014

## Dengue in Malaysia, 2012-2014



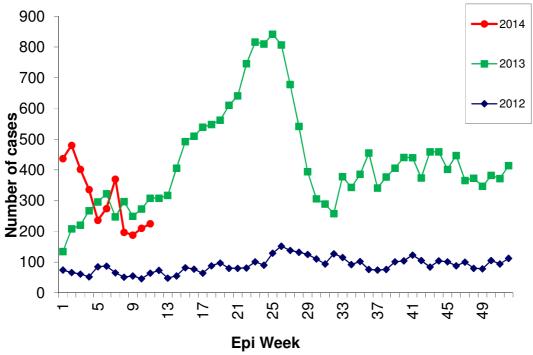
(Source: National Center for Laboratory and Epidemiology, Ministry of Health) Malaysia up to 15 March 2014 (Source: Ministry of Health)

## Dengue in Philippines, 2012-2013



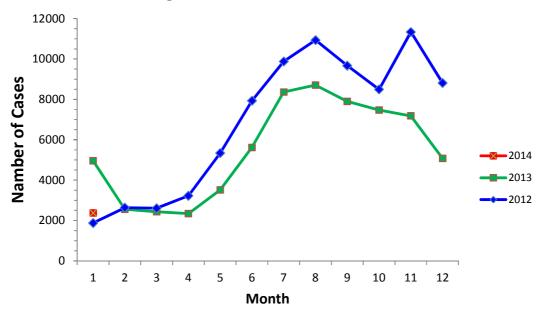
Philippines up to 15 February 2014\* (Source: Department of Health National Epidemiology Center) \*more updated figure see above table

# Dengue in Singapore, 2012-2014



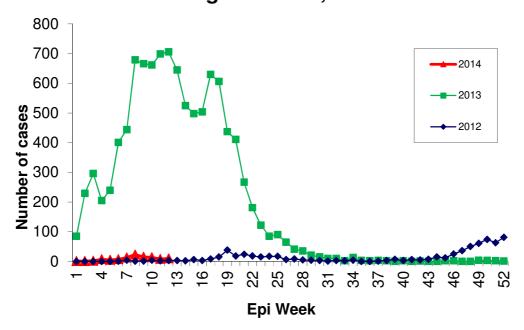
Singapore up to 15 March 2014 (Source: Ministry of Health)





Viet Nam up to January 2014 (Source: Ministry of Health)

# Dengue in NEC, 2012-2014



New Caledonia up to 21 March 2014 (Source: Pacific Public Health Surveillance Network)