# World Health Organization Western Pacific Region

## **Dengue Situation Update**

### 22 April 2014

Regional dengue activity is variable. Malaysia continues to report a greater number of reported cases in 2014 compared to 2013, for the same time period. However, cases appear to be decreasing. Singapore has reported a similar number of cases in 2014 compared to 2013. Australia, Cambodia, Lao PDR, the Philippines and Viet Nam reported lower levels of dengue activity in 2014 compared to 2013.

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

High level of dengue activity is being observed in Fiji, French Polynesia, Solomon Islands and Tuvalu. 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). DENV-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, especially with regard to serotype circulation.

In **Fiji**, the outbreak since last December has affected over 20,000 individuals, including 13 deaths. Most cases have occurred in the Central Division. The Ministry of Health, in collaboration with other government sectors and health partners including WHO, has embarked on controlling and responding to the outbreak.

In **French Polynesia**, a dengue outbreak is ongoing. Since February 2013, there have been 1,906 positive cases of dengue as of 4 April 2014. In the month of March, all cases serotyped were dengue serotype-1 and the rate of hospitalization and severe cases has increased.

In **Solomon Islands**, 754 cases of dengue have been reported since January 2014 (138 additional cases reported this week). A post disaster epidemic surveillance system was set up in Honiara and Guadalcanal Province following flash flooding on 4 April 2014. Rapid reference laboratory testing of samples by the Institut Louis Malarde, French Polynesia, confirmed the dengue serotype as type 3. As this is the same type that caused the large dengue outbreak in 2013, and because infection with one serotype results in life-long immunity to that specific serotype, the likelihood of an explosive and widespread outbreak is lower than if another serotype was identified.

In **Tuvalu**, a dengue outbreak is occurring with nine confirmed cases out of 43 dengue-like illness (DLI cases), as of 10 April 2014. The Ministry of Health has embarked on an extensive clean-up campaign.

#### Zika virus infection in the Pacific region

Recently, a number of islands and territories have detected zika virus including French Polynesia, New Caledonia and Cook Islands.

In French Polynesia, there were 8,700 suspected cases of zika virus infection reported by the health professionals sentinel network since early October 2013. All islands of French Polynesia have been affected, and in all islands, case numbers appear to be declining.

In New Caledonia, the Department of Health and Social Affairs had detected the first indigenous case of zika virus infection on 19 Jan 2014. Since then, indigenous transmission has continued to increase in New Caledonia. As of 27 Mar, there have been 852 confirmed cases of zika virus since 25 November 2013 and of these, 801/852 (94%) were indigenous transmission. Surveillance and response capacities are strong and at this stage, WHO assistance has not been requested. WHO continues to monitor the situation closely.

In Cook Islands, an outbreak of zika virus has been declared by health authorities. As of 6 April, 2014, there have been 900 cases of dengue-like illness. Health authorities are currently responding to and implementing measures to control the 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 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.

#### Chikungunya virus infection in the Pacific region

An outbreak of chikungunya has been reported in the Kingdom of Tonga. Additionally, Aedes albopictus, a highly efficient vector for Chikungunya, has recently been detected in the Kingdom of Tonga.

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

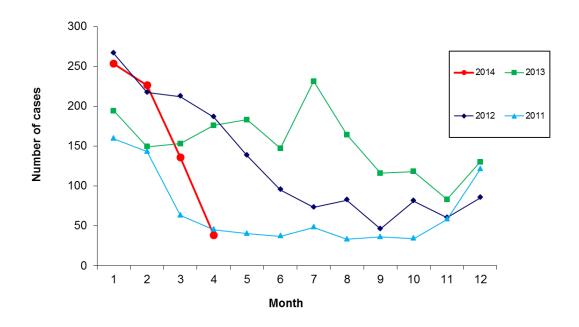
	Recent trend**	No. reported cases per latest reporting period (week (w) or month (m))	Reporting Period	No. reported cases per same reporting period in 2013 (week (w) or	Cumulative No. reported cases (deaths)		2014 /2013 ratio
		month (m)		month (m))	2014	2013	
Australia***	<b>↓</b>	136/m	Mar	176/m	615(NA)	496 (NA)	0.8
Cambodia	<b>↑</b>	24/w	2-8 Apr	121/w	240 (1)	1 628 (11)	0.1
Lao PDR	<b>\</b>	20/w	5-11 Apr	121/w	410 (0)	1 628 (11)	0.3
Malaysia	n/a	1 313/w	7-13 Apr	392/w	27 562 (64)	6 991 (14)	3.9
Philippines	<b>V</b>	95/w	23- 29 Mar	1 757/w	15 374 (62)	31 407(125)	0.5
Singapore	<b>↑</b>	247/w	6-12 Apr	492/w	4 269(NA)	4 334(NA)	1.0
Viet Nam	Ψ	2 373/m	January	4 962/m	4 277 (1)	4 962 (7)	0.5
New Caledonia	<b>\</b>	9/w	10-17 Apr	504/w	186 (NA)	7 483 (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.

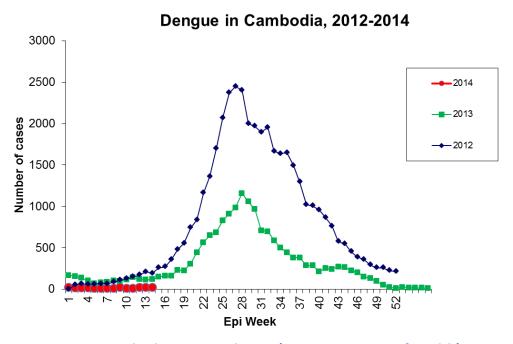
<sup>\*\*</sup>Recent trend is based on the 3 week moving average for countries reporting by week and monthly comparisons for the last complete month for countries reporting by month.

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

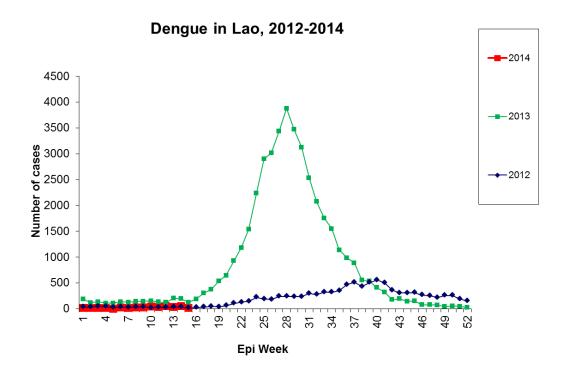
Dengue in Australia, 2011-14



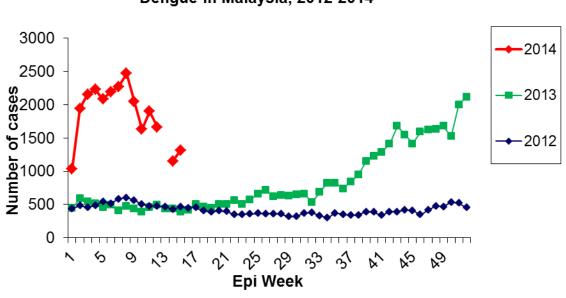
**Australia up to March 2014 (Source: Dept of Health)** 



Cambodia up 8 April 2014 (Source: Ministry of Health)

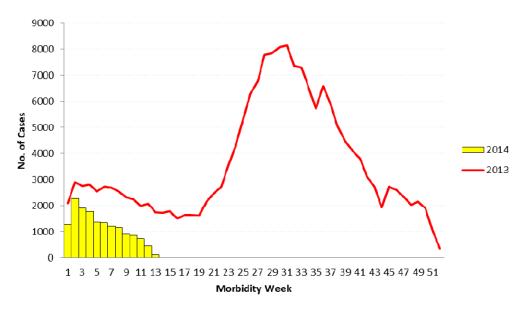


Lao PDR up to 11 April 2014 (Source: Ministry of Health)

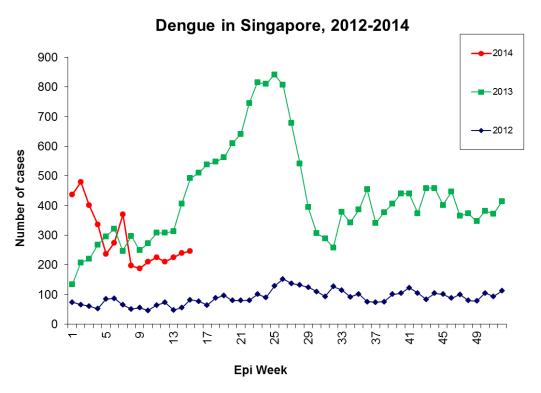


Dengue in Malaysia, 2012-2014

(Source: National Center for Laboratory and Epidemiology, Ministry of Health) Malaysia up to 13 April 2014 (Source: Ministry of Health)

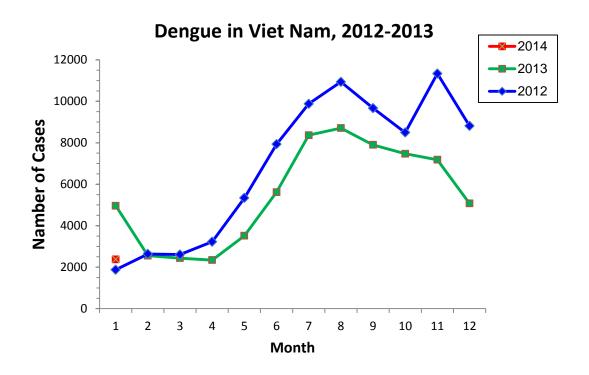


Philippines up to 29 March 2014\* (Source: Department of Health National Epidemiology Center)



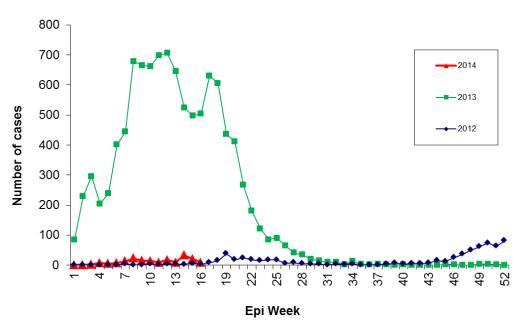
\*more updated figure see above table

Singapore up to 12 April 2014 (Source: Ministry of Health)



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





New Caledonia up to 17 April 2014 (Source: Pacific Public Health Surveillance Network)