World Health Organization
Country Office for Myanmar

World Health Day
Prevent Control
Vector-borne diseases

Update on Vector Borne Diseases in Myanmar

As a tropical country, Myanmar is conducive for vector borne diseases. The following Vector borne diseases are prevalent in Myanmar: Malaria, Filariasis, Japanese Enchephalitis, Dengue, and Chikungunya

Malaria

Malaria remains a leading cause of morbidity and mortality in Myanmar. Considerable progress has been made over the past 20 years in reducing the burden. It is a re-emerging public health problem due to climatic and ecological changes, population migration, development of multi-drug resistant P. falciparum parasite, development of insecticide resistant vectors and changes in behavior of malaria vectors. Long-term trend shows decreasing malaria morbidity and mortality in Myanmar. The national malaria control programme has also been partnered by several NGOs-international and local, bilateral agencies and WHO in scaling up malaria control intervention in malaria risk areas. The figure 1 shows the Malaria morbidity and mortality in the country form 2008-2012.

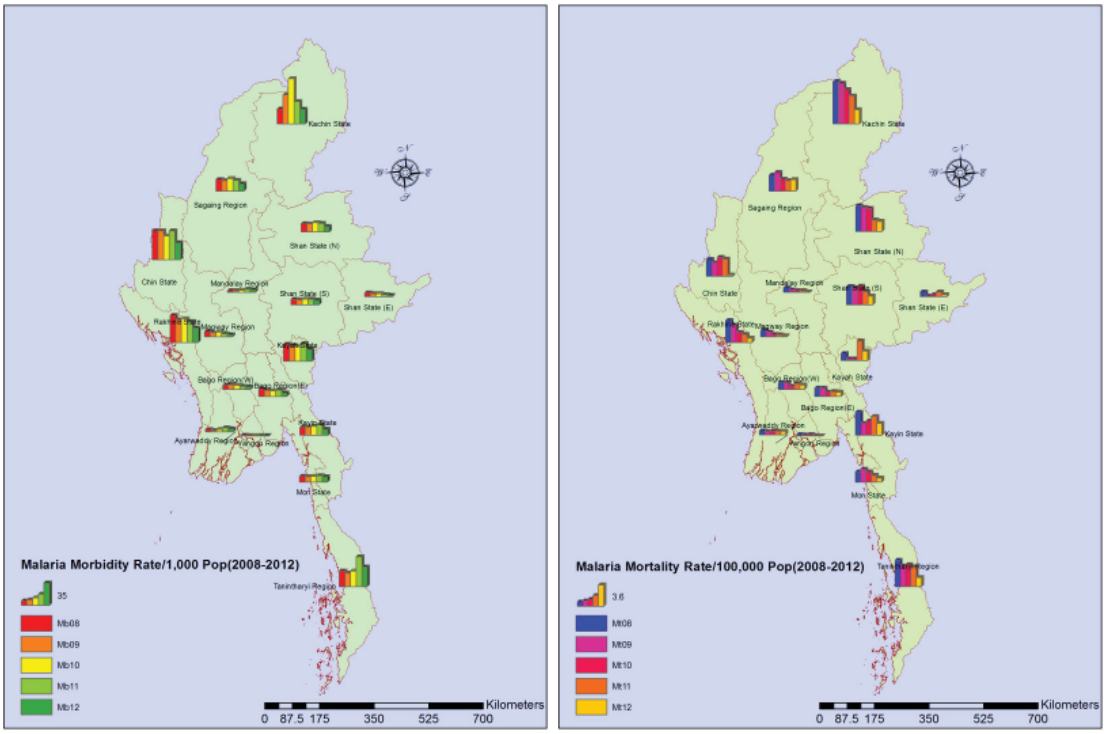

Figure (1) Malaria Morbidity and mortality in Myanmar 2008-2012

Myanmar is located in South East Asian Region and bordering with Bangladesh, China, India and Thailand. There are 39 townships located along these borders and there has been increasing concern about malaria situation in the border areas of Myanmar. Figure 2 shows the malaria morbidity and mortality along the borders.

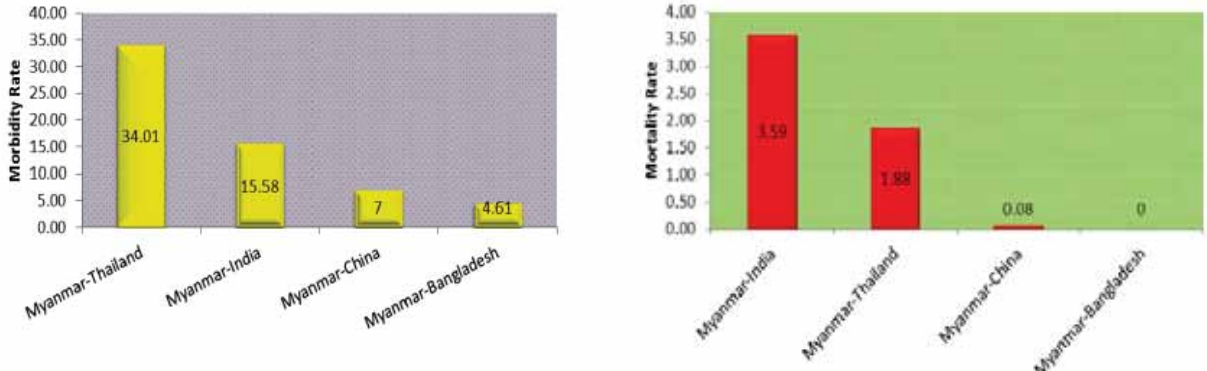

Figure (2) Morbidity and mortality rates in international borders (2012)

“ရောဂါဝိုးသယ် ဝိုးမွားယေ်၊ သေးယေ်သော်ငြား အန္တရာယ်များ၊ ဝိုင်းဝန်းကာကွယ်ကြစို့လား”

It is noteworthy to mention that Myanmar has already reached MDG targets pertaining to Malaria control in the country. Myanmar has received funds to control and curtail the spreading of P. falciparum drug resistant malaria from several donors. GFATM is the largest funding source for malaria control in Myanmar. 3MDG and Regional Artemisinin Initiative are other funding sources for Malaria in Myanmar. ■

Dengue (DF/DHF)

Historically, DF/DHF have been a disease of urban in Myanmar, but since 1998, more cases have been reported in rural areas. In 2011, the distribution of cases was equal in urban and rural area. Causes of increasing cases may be due to: climatic change, rapid urbanization, population migration and improper waste disposal such as tins, plastic wares, unused boats, boat like food containers for cows and pigs, tires & batteries in the house compound. Figure 3 shows the changing pattern of DF/DHF in Myanmar over the past 3 decades. Although increasing the reported cases, Case Fatality Rate (CFR) decreased from 4% to less than 1% (0.36%) in 2012. DHF cases were found throughout the whole year in 2012 but more prevalent in rainy season i.e. from June to October. ■

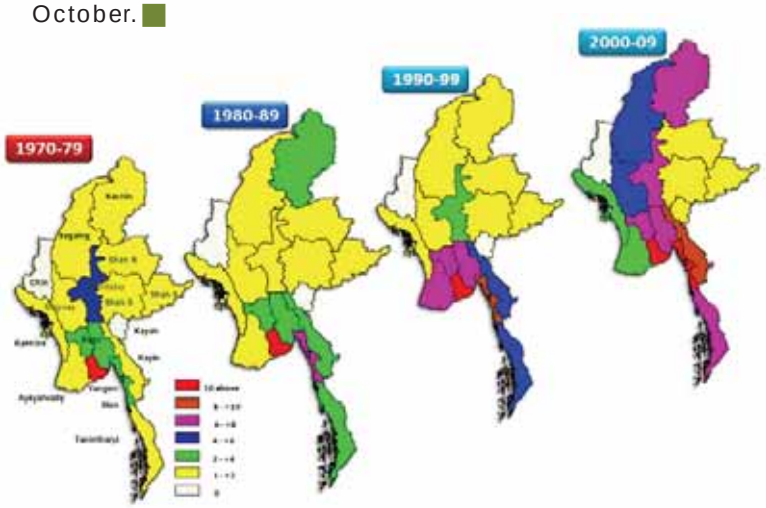

Figure (3) Changing DHF situation in the last three decades (reported DHF cases per 100,000 among Under 15 years of age)

Chikungunya

During 2009, there were epidemics of chikungunya in Southeast Asia countries including Thailand. Therefore, the Department of Health, Myanmar was in alert and had taken actions on disease surveillance, prevention and control especially in the border areas such as Thaninthayi Region, Mon, Kayin and Shan States in collaboration with the National Health Laboratory. Immunoglobulin M (IgM) for the Chikungunya was found in 32 blood samples out of 52 samples of suspected cases of having Chikungunya infection. Moreover, there were 96 IgM positive cases among 199 examined suspected cases from Yangon and some other townships. ■

Japanese Enchephalitis (JE)

According to available data in 2007 to 2012, age group wise distribution data, out of 74 cases age group wise recorded, 5-9 years age group contributed the highest number of cases and deaths which was followed by 1-4 years age group. Disease was very rare in 40+ years of age. In 2012, the highest morbidity and mortality of JE cases were seen in the age group of (5-9 yr) and (>15 yr). ■

Lymphatic Filariasis

According to the mapping of lymphatic filariasis in Myanmar in 2007, 45 out of total 65 districts (69% of districts) were endemic for lymphatic filariasis and 41.8 million people are at risk among total population of 60.38 millions. Myanmar has adopted WHO collaborative Global Programme to Eliminate Lymphatic Filariasis (GPELF) and Ministry of Health has developed the National Plan to Eliminate Lymphatic Filariasis (NPELF) in 2000, the strategy aimed at elimination of lymphatic filariasis in 2020 (i.e. <1/1000 population) through Mass Drug Administration (MDA) using 2 drugs: Albendazole and Diethylcarbamazine.

MDA had been started in 10 townships in Magwe Region as a pilot project in 2001, and expanded the coverage gradually to cover 43 Implementation Units (Districts) in 2013. Microfilaria baseline rate is 15.13% and the rate reduced to 0.79% in all sentinel sites in 2012 after 9th rounds of MDA. Ministry of Health has conducted the MDA campaign successfully with the participation of volunteers: village and ward administrative members and local non-governmental organizations under the supervision of basic health staff. In 2013 MDA covered 36 districts (36 IUs) in 10 States and Regions, including Yangon, Mandalay, Mon , Kayin, Bago, Ayeyarwady and 4 others, covering total population of 35.79 million. ■ ■ ■