

Current major event

SAGE recommends introduction of dengue vaccine in geographic settings with high endemicity

The Strategic Advisory Group of Experts (SAGE) on immunization recently reviewed the evidence generated from two large Phase 3 clinical trials, one conducted in Asia and the other in Latin America. On the basis of currently available evidence, SAGE recommended that the countries may consider introduction of dengue vaccine (CYD-TDV) only in in geographic settings with high endemicity (sero-prevalence is greater than 70% or more in targeted age group or other suitable epidemiologic marker).

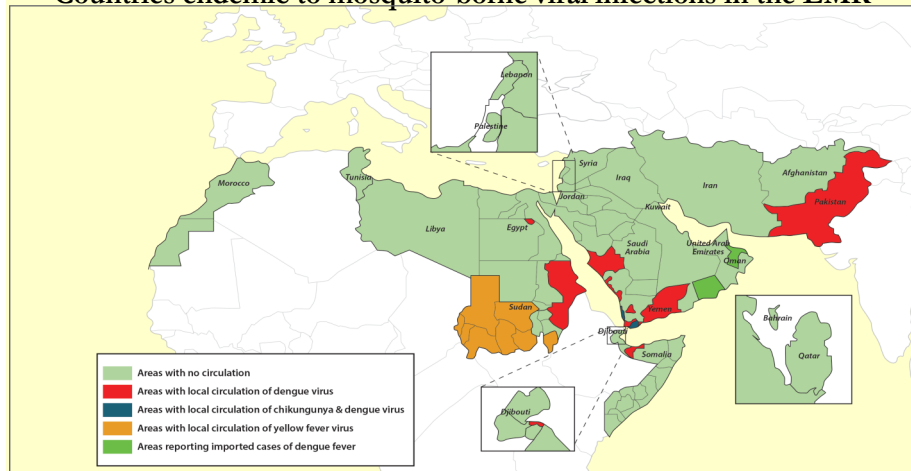
Editorial note

Worldwide, dengue is the most widely spread mosquito-borne viral infection. In the last 60 years, the incidence of dengue, worldwide increased by 30 fold with increased geographic range and expansion from rural to urban settings.

In the Eastern Mediterranean Region (EMR), dengue is endemic in a number of countries in the Red sea rim with history of repeated and explosive outbreaks. These countries include– Saudi Arabia, Sudan, Yemen and Pakistan. Based on the currently available data, presence of competent vectors also make few other countries in the Region such as Djibouti, Egypt, Oman and Somalia, at risk of dengue outbreak.

In the current situation and contexts, it may be a long way for the countries of the Eastern Mediterranean Region for considering the introduction of dengue vaccines. The current surveillance data on dengue and other mosquito-borne viral infections is inconsistent and imperfect to determine the burden of dengue in the endemic belt of the Eastern Mediterranean Region. Data are also scarce

Countries endemic to mosquito-borne viral infections in the EMR



Dengue vaccine: some features

- First licensed vaccine– CYD-TDV (Dengvaxia®) for use in person aged 9-45 years or 9-60 years.
- Given in three doses at 0, 6 and 12 months interval.
- Vaccine efficacy over 25 months after the first dose has been found to be 65%.
- Effective against all four serotypes (higher protection against serotypes-DENV 3 and 4).
- The vaccine is not recommended for children below 9 years of age, pregnant women and immunocompromised people.
- The vaccine is not effective in containing an ongoing outbreak and should be used only as part of routine immunization programme.
- The vaccine is not recommended for travellers or health-care workers.

or absent to determine the most affected age group for dengue virus infection during an epidemic or during an endemic season. Moreover, there remains a poor understanding on dengue seroprevalence in different age groups in these endemic settings.

As more evidence becomes available on the protective efficacy of the dengue vaccines, a time will come when a serious policy decision will have to be taken to introduce dengue vaccines for the countries in the Region with a view to reducing “avoidable” morbidity and mortality. It is therefore imperative that the endemic countries standardize their surveillance for dengue and other emerging infections like Zika using a uniform case definition.

Update on outbreaks

in the Eastern Mediterranean Region

MERS-CoV in Saudi Arabia

Current public health events of international concern

[cumulative N° of cases (deaths), CFR %]

Avian Influenza : 2006-2016

Egypt (A/H5N1)	[350 (117), 33.4%]
Egypt (A/H9N2)	[3 (0)]

MERS-CoV: 2012-2016

Saudi Arabia	[1398 (598), 42.7%]
Jordan	[39 (12), 31%]
Oman	[7 (3), 42%]
UAE	[78 (11), 14.1%]
Kuwait	[3 (1), 33.3%]
Qatar	[14 (5), 35%]
Bahrain	[1 (1), 100%]

Lassa fever : 2015-2016

Nigeria	[159(82), 51.5%]
Benin	[71(23),32.3%
Germany	[2(0)]
Togo	[2(0)]

Avian Influenza A (H7N9) : 2013-2016

China	[752 (295),39.2%]
-------	-------------------

Viral Haemorrhagic Fever (of unknown aetiology)

Sudan	[572 (105),18.1%]
-------	-------------------

Wild poliovirus: 2014-2016

Pakistan	[368 (0)]
Afghanistan	[52(0)]

Zika Virus Infection: 2007-2016

58 countries and territories have reported transmission so far