World Health Organization
Regional Office for the Eastern Mediterranean

Weekly Epidemiological Monitor

Volume 4 Issue 11, Sunday 13 March 2011

Current major event

Outbreak of Dengue/ Chikungunya in Republic of Yemen

As of 12 March 2011, the Ministry of Public Health in Yemen has reported over 15,000 suspected cases of Chikugunya and dengue fevers from Al-Hodeida Governorate. 104 of the cases were fatal. The outbreak seems to have started in September 2010. Chikungunya was first laboratory confirmed on 15 December 2010.

The Ministry of Health and Population, World Health Organization and NAMRU-3 have responded and control measures have been put in place.

Editorial note

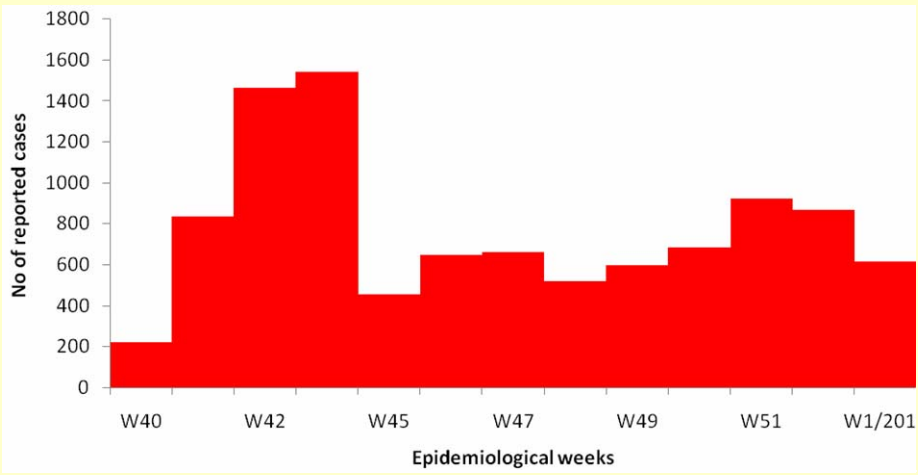
An outbreak of chikungunya, with sporadic cases of dengue has been reported in Al-Hodeida governorate of Yemen. The cases of chikungunya and dengue have been laboratory confirmed at the arboviral and haemorrhagic fever laboratory of NAMRU-3, Egypt in December 2010. Some cases also showed laboratory evidence of co-infection with chikungunya and dengue.

Dengue has been known in Yemen and has caused frequent outbreaks since 2003. However, the confirmation of Chikungunya fever in Al-Hodeida and the ongoing outbreak due to the disease is a new development in the Country. This has added a new dimension to the list of emerging and re-emerging diseases in the sub-region. The close similarity of the two diseases (dengue and chikungunya) cannot rule out if chikungunya virus has not been circulating in the area for sometime now.

Chikungunya is a mosquito-borne viral disease first described during an outbreak in southern Tanzania in 1952. It is an alphavirus of the family Tongaviridae. The virus is transmitted from human to human by the bites of infected female mosquitoes. Most commonly the mosquitoes involved are *Aedes aegypti* and *Aedes albopictus*, two species that are also vectors to other mosquito-borne viruses like dengue, (WHO). The disease is characterized by an abrupt onset of fever frequently accompanied by joints pain.

The prevention and control of Chikungunya relies heavily on reducing the number of natural and artificial water-filled containers habitat that supports breeding of the mosquitoes. In the case of Yemen, this is usually indoor water storage containers (pots, jars etc) which could be easily targeted. This requires mobilization of the affected communities. However, the experience from dengue outbreaks control has not been very encouraging in Yemen. The health authorities should put the recommendations from the assessments into practice. The focus should be on strengthening epidemiological, laboratory and entomological surveillance for early detection.

Weekly reported cases of dengue/chikungunya fevers in Al-Hodeida, Yemen; 08/10/2010 to 07/01/2011



Key facts (WHO)

Chikungunya is a viral disease that is spread by mosquitoes. It causes fever and severe joint pain. Other symptoms include muscle pain, headache, nausea, fatigue and rash.

The disease shares some clinical signs with dengue, and can be misdiagnosed in areas where dengue is common.

There is no cure for the disease. Treatment is focused on relieving the symptoms.

The proximity of mosquito breeding sites to human habitation is a significant risk factor for chikungunya.

The disease occurs in Africa, Asia and the Indian subcontinent. In recent decades mosquito vectors of chikungunya have spread to Europe and the Americas. In 2007, disease transmission was reported for the first time in Europe, in a localized outbreak in north-eastern Italy

Update on outbreaks

in the Eastern Mediterranean Region

Chikungunya in Yemen, **Cutaneous Anthrax** in S. Sudan, **A(H5N1)** in Egypt

Current public health events of international concern
[cumulative N° of cases (deaths), **CFR %**]

Avian influenza	
Egypt	[133 (45), **33.8%**]
Indonesia	[174 (144), **82.8 %**]
Viet Nam	[119(59), **49.6%**
China	[40(26), **65%**]
Global total	[537 (317), **59%**]
Cholera	
Haiti	[185012*(3790), 2 **%**]
Chad	[2508 (111), **4.4%**]
Nigeria	[29115 (1191),**4%**]
Kala-Azar (Visceral Leishmaniasis)	
S. Sudan	[6363(303). **4.7%**]
Dengue fever	
Pakistan	[11024(40), **0.3 %**]#
Yemen	[1903(12), **0.6 %**]#
Yellow fever	
Uganda	[226(53), **23.4 %**]

*CFR=Case-Fatality Rate; * Number of hospital visits; # Laboratory-confirmed cases only*