World Health Organization
Regional Office for the Eastern Mediterranean

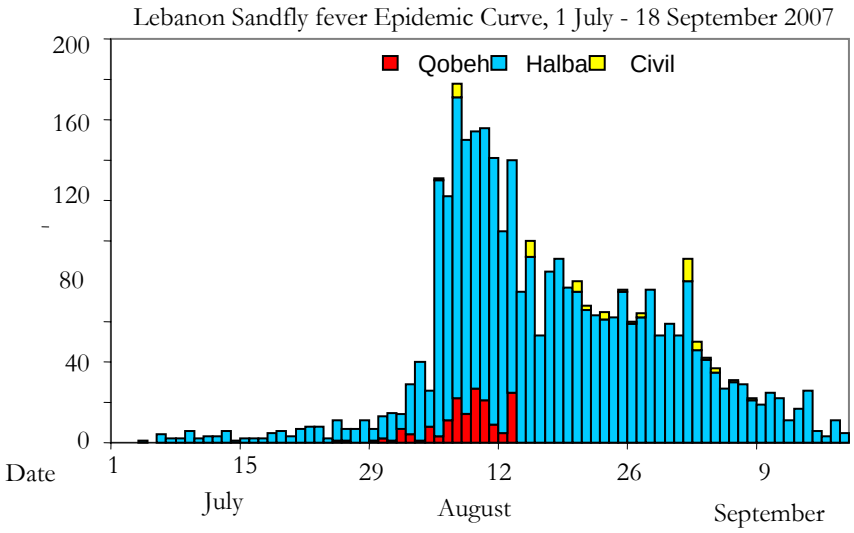
Weekly Epidemiological Monitor

Volume 1, Issue 5, Sunday 03 February 2008

Current major events

Sandfly Fever in Lebanon
(July 2007 - September 2007)

An outbreak of an acute, self-limiting febrile illness characterised by headache, myalgia and polyarthralgia with or without leucopenia occurred in the Akkar, Menieh, Dinnieh districts, North Province, Lebanon, from 1 July to 18 September 2007. On 7th September 2007 the Ministry of Public Health, Lebanon, notified WHO of the outbreak and requested technical support to investigate the event . In response, WHO mobilised a medical epidemiologist/public health physician and a vector control expert to assist the national authorities in conducting risk assessment, outbreak investigation, and advise on control measures. Field activities included collection and shipment of sera for examination at a WHO Collaborating Centre for arbovi ruses, and carried out vector trapping and entomological studies. More than 800 cases and no death were reported during the outbreak period. Acute and convalescent sera tested at in UBIVE Institut Pasteur, Lyon, France, a WHO Collaborating Centre for Arboviruses, confirmed the outbreak as Sandfly fever caused by Phleboviruses, members of the Bunyavirus group.



Editorial note

This is the first time that Sandfly fever (a viral disease also known as Pappataci fever or three-day fever or phlebotomus fever) is ever reported in Lebanon. The disease is caused by Phlebovirus, a member of the Bunyavirus group. The illness is characterised by fever, chills, headache, myalgia and arthralgia, tiredness and conjunctivitis. In some cases, sandfly fever can also present with neck stiffness as a result of aseptic meningitis.

Sandfly fever has caused outbreaks in troops deployed to the Mediterranean and Middle East including during campaigns in Cyprus and the Gulf War respectively. The disease was recognised as early as WWII in British and Commonwealth troops. Phleboviruses have been detected in Italy, Spain, Greece, Cyprus, Iraq and Syria among other Mediterranean and Middle Eastern countries.

Although sandfly fever is unknown in Lebanon before this finding, the North Province is reported to experience regular outbreaks aseptic meningitis of unknown aetiology during summer months. This coincides with the months of peak sandfly activity in the region. In the light of this finding it would be important to consider sandfly fevers in the differential diagnosis of future outbreaks of aseptic meningitis of unknown aetiology.

Phlebotomine sandflies:

- Vectors of leishmaniasis; can cause a serious but localized biting nuisance; also transmit sandfly fever
- Adults are weak fliers; usually stay within a few hundred metres of their breeding places
- Most biting occurs outdoors by female flies (need a bloodmeal in order to develop eggs)
- Measures about 1.3–3.5 mm in length; hairy appearance; conspicuous black eyes; long, stilt-like legs

Update on outbreaks
in the Eastern Mediterranean Region

Thallium poisoning in Iraq; **meningococcal meningitis**, Eastern Equatoria State, Sudan

Current public health emergencies of international concern
[cumulative N° of cases/deaths, **CFR** %]

Avian influenza	
Egypt	[43/19, **44.2%**]
Indonesia	[124/102, **83.3%**]
Viet Nam	[102/48, **47.1%**]
Cholera	
D.R. Congo	[200/11, **5.5%**]
Nigeria	[36/12, **33.3%**]*
Laos	[365/3, **0.8%**]
Iraq	[4,697/ 24, **0.5%**]
Ebola	
Uganda	[149/37, **24.8%**]
Meningitis	
Uganda	[380/17, **4.5**]
Rift Valley Hemorrhagic Fever	
Sudan	[698/222, **31.8%**]
Yellow Fever	
Brazil	[18/9, **50%**]

(=Unofficial figures)*
CFR=Case-Fatality Rate