

#### Regional Office for the Eastern Mediterranean

# Weekly Epidemiological Monitor

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# **Current major event**

#### Hepatitis A cases in Syria

In recent time, the Ministry of Health of Syria has reported an increasing number of acute jaundice syndrome cases from different governorates of the country. Laboratory tests performed in Damascus has identified hepatitis A virus (HAV) as the causative organism of this high number of acute jaundice syndrome cases.

### **Editorial note**

A total of 627 suspected cases of HAV were reported from eight governorates in Syria between 1 December 2014 and 27 March 2015 (*Figure 1*). The geographical distribution patterns showed the highest occurrence levels in Deir Ezor governorate (56%) followed by Rural Damascus (18%) and Damascus (12%) governorates. The epidemic curve (*Figure* -1) shows multiple peaks, a feature suggestive of person-to-person transmission as the main mode of spread of in the disease among the at-risk population.

The age distribution pattern of the reported cases showed that most of transmission occurred among children under 15 years of age (71%). Even though children accounted for the majority of the cases, the high proportion of cases among the older population (29%) remains a cause for concern. Further more in Damascus governorate, the older population accounted for unprecedented 80% of the reported cases.

Syria is regarded as one of HAV endemic countries in the region.. In such settings HAV infections typically occur in early childhood before children acquire immunity. Once infected immunity is life long and HAV infection is rare among adults. The observed unusual pattern of large proportion of HAV cases among adults in the current context suggest that epidemiological transition was probably underway in Syria with improvement in water and sanitation and reduced childhood exposure to the disease. Damascus appears to have witnessed the biggest improvement in water and sanitation standard before the current war broke out, and as a results



# Table 1. Epidemiological characteristics of the reported cases of AJS caused by

Age group	Distribution	
	Number	%
Less than 5	218	35
5-14 years	228	36
More than 14 years	181	29
Total	627	100

accumulation of a large pool of nonimmune older population, given the large number of cases among adults observed during the current surge.

The current increase in HAV cases is occurring in Syria against a back drop of ongoing conflict and humanitarian crisis with over a million internally displaced persons population without access to adequate water and sanitation due to destruction of water and sanitation infrastructure in the county. This situation is likely to have contributed to the outbreak of water born diseases such as viral hepatitis caused by HAV.

The higher number of cases of HAV among adults has implication for prevention and control. Targeted vaccination maybe considered for unprotected older population at risk of complications, to complement ongoing hygiene promotion, and water and sanitation interventions. However, the logistical challenges in administering a mass vaccination for HAV in the current context in Syria may be overwhelming. Given the current situation, the priority should be to improve surveillance, hygiene, and access to safe water and sanitation.

## Update on outbreaks

in the Eastern Mediterranean Region

MERS-CoV in Saudi A enza A (H5N1) in Egypt	rabia, Avian Influ-	
Current public health events of international concern [cumulative N° of cases (deaths), CFR %]		
Avian Influenza : 2006-2015		
Egypt (A/H5N1)	[336 (114), 24%]	
Egypt (A/H9N2)	[1(0), 0%]	
MERS-CoV: 2012-2015		
Saudi Arabia	[957 (376), 39.3%]	
Jordan	[12 (6), <b>50%</b> ]	
Oman	[5 (3), 60% ]	
UAE	[71 (9), 12.7% ]	
Kuwait	[3 (1), <b>33.3%</b> ]	
Tunisia	[3 (1), <b>33.3%</b> ]	
Qatar	[11 (4), 36.4%]	
Yemen	[1 (1), <b>100%</b> ]	
Egypt	[1 (0), <b>0%</b> ]	
Lebanon	[1 (0), <b>0%</b> ]	
Iran	[5 (2), <b>40%</b> ]	
Ebola Virus Disease: 2014-2015		
Guinea	[3515 (2333),66.3%]	
Liberia	[9862 (4408),44.6%]	
Sierra Leone	[12138 (3831),31.5%]	
UK	[1(0), <b>0%</b> ]	
Nigeria	[20 (8), <b>40%</b> ]	
Senegal	[1(0), <b>0%</b> ]	
Spain	[1(0), <b>0%</b> ]	
USA	[4(1),25%]	
Mali	[8(6),75%]	
Wild poliovirus: 2014-2015		
Pakistan	[325 (0), 0% ]	
Afghanistan	[29(0), <b>0%</b> ]	

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