

Regional Office for the Eastern Mediterranean

Weekly Epidemiological Monitor

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Current major events

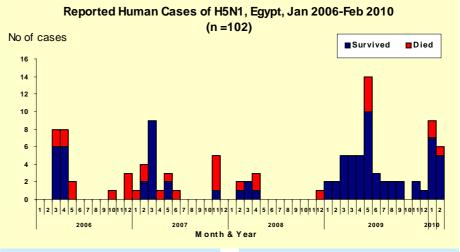
New human cases of avian influenza A(H5N1) in Egypt

In the month of February 2010, the Egyptian Ministry of Health announced five new human cases of avian influenza A(H5N1) bringing the total number of human cases of avian influenza in the country to 102. Thirty (30) of these cases were fatal (29.4%). Field investigations into the cases revealed all had close contacts either with sick or dying poultry.

Editorial note

The avian influenza A (H5N1) continues to evolve and spread in Egypt. As of 28 February 2010, the Ministry of Health in Egypt reported a total of 102 confirmed human cases of avian influenza A (H5N1) with 30 related deaths. Since the first human case of avian influenza A (H5N1) was reported for the first time in the country in 2006, Egypt reported a total of 18 cases with 10 deaths (CFR: 55.5%) in that year (2006). The following year (2007), 25 cases with 9 deaths (CFR: 36%) were reported from Egypt. In the year 2008, only 8 cases including 4 deaths (CFR: 50%) and in 2009, 39 cases with 4 deaths (CFR: 10.2%) were reported from Egypt. In the first two months of 2010, there has been a sudden surge in cases with 12 cases including 3 related deaths (CFR: 25%) being reported from Egypt during January (7 cases with 2 deaths) and February (5 cases with 1 related death)

The Highly Pathogenic Avian influenza (HPAI) has remained endemic in the animal population throughout Egypt. The virus continues to circulate in the birds population throughout the year with recurrent epizootics in various parts of the country. The seasonality of avian influenza A(H5N1) in Egypt seems similar (Please see the epi curve) to that of human influenza. The virus has, apparently, been observed to be more transmissible among chickens and consequently to humans during the cooler months. As such, virus has been observed to spread in the human population during the winter season and peaks



Age distribution of confirmed human cases of Influenza A/(H5N1) in Egypt Age group Cases Deaths CER (%)

Age group	Cases	Deaths	CFR (%)
< 5 yrs	34	1	2.9
5 to 15 yrs	29	4	13.7
>15 to 30 yrs	26	18	69.2
>30 to 45 yrs	11	5	45.4
>45 yrs	2	2	100
Total	102	30	29.4

around March—April and starts to decline by June.

The continuing evolution of H5N1 virus in Egypt raises important question. First the can the source of H5N1 be eliminated? And second, are the control measures in Egypt proving to be effective ? Controlling HPAI by eradicating it at the source in domestic poultry has worked for some wealthy countries through a strategy of quarantine and culling of poultry and implementation of improved bio-security measures for poultry facilities. In some other countries, the same strategy resulted in only a temporary respite. Some countries, however, have adopted vaccination programme for uninfected poultry in conjunction with the quarantine and culling of birds/backyard poultries, only, with mixed result.

The current situation in Egypt, warrants an urgent investigation as to why the virus has become entrenched in the country with concurrent surge in infection to humans in recent time.

Update on outbreaks

in the Eastern Mediterranean Region

Avian Influenza A(H5N1) in Egypt; Dengue fever in Sudan

Current public health events of international concern [cumulative N° of cases (deaths), CFR %]			
Avian influenza	a		
Egypt	[102 (30), 29.4%]		
Indonesia	[163 (135), 82.2%]		
Global total	[481 (286), 59.5%]		
Meningococcal meningitis			
Chad	[167 (17), 10.1%]		
CAR	[24 (5), 20. 8%]		
Uganda	[74 (4), 5.4%]		
Burkina Faso	[1596 (246), 15.4%]		
Dengue fever			
Sudan	[311 (4), 1.2%]		
Pandemic (H1N1) 2009			
AFRO	No of deaths: 167		
AMRO	No of deaths: At least 7484		
EMRO	No of deaths: 1018		
EURO	No of deaths: At least 4266		
SEARO	No of deaths: 1661		
WPRO	No of deaths: 1690		
GLOBAL Total	No of deaths: 16,226		

CFR=Case-Fatality Rate