

Current major event

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

During the month of December 2010, seven (7) new human cases of avian influenza A (H5N1) including four (4) deaths were reported by the Ministry of Health in Egypt. This brings the total number of reported cases of human infection with avian influenza (H5N1) in Egypt to 119. Of these cases confirmed in Egypt to date, 40 have been fatal.

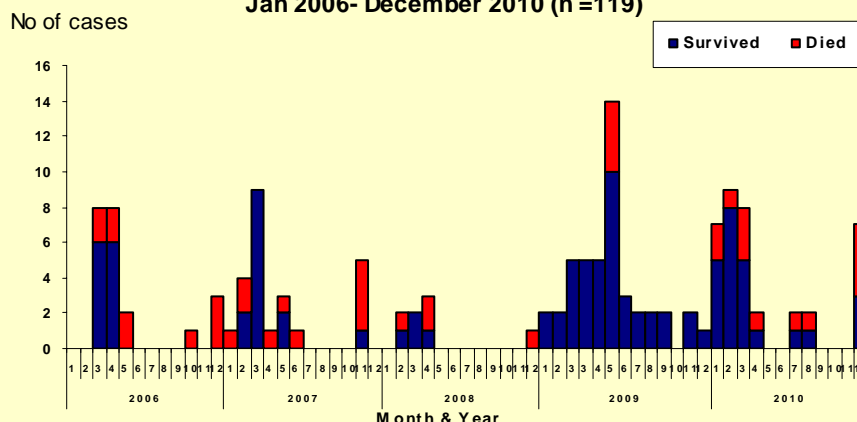
Editorial note

During the month of December 2010 which coincided with the onset of winter season in Egypt, a sudden upsurge of human cases of AI (H5N1) has been observed.

After the first laboratory-confirmed human case of AI was reported in Egypt on 20 March 2006 all the 29 Governorates in the country have now reported human cases of avian influenza (H5N1) meaning that the virus is now fully entrenched in the country.

There are two striking features that have been observed with the human cases of AI (H5N1) in Egypt in recent time. First— of the total number of confirmed human cases of AI (H5N1) reported globally in 2009 and 2010, Egypt reported the maximum number of cases compared to any other country in the world. For example, in 2009, Egypt reported a total of 39 cases including 4 deaths out of the global total of 73 cases including 32 deaths (53% of global total). In 2010, Egypt reported a total of 29 cases including 13 deaths out of the global total of 48 cases including 24 deaths (60% of global total) from human cases of AI (H5N1). The second striking feature is the age-specific infection and death profiles among confirmed human cases of avian influenza (H5N1) which differ markedly from those reported or recorded in other countries. The case fatality rate among human infections with AI (H5N1) in Egypt is 33.6% versus an average of 66% in other countries. In Egypt, children younger than 15 years comprise about 57% of all reported cases (68/119) nearly twice the

Reported human cases of avian influenza A (H5N1) in Egypt, Jan 2006– December 2010 (n =119)



Age distribution of confirmed human cases of Influenza A/ (H5N1) in Egypt

| Age group | Cases | Deaths | CFR (%) |
|---------------|------------|-----------|-------------|
| < 5 yrs | 37 | 2 | 5.4 |
| 5 to 15 yrs | 31 | 5 | 16.1 |
| >15 to 30 yrs | 34 | 22 | 64.7 |
| >30 to 45 yrs | 13 | 8 | 61.5 |
| >45 yrs | 4 | 3 | 75 |
| Total | 119 | 40 | 33.6 |

global average of approximately 25% and the death rate in this age group is far less than compared to above 15 years age group (10% in below 5 yrs age group versus 64% in the above 5 yrs age group). The other difference in Egypt is the reported high number of females than males amongst the confirmed cases.

Although, the number of cases, reported in 2010 dropped (by about 25%) compared to the previous year, the case fatality ratio has increased by about four folds in 2010 compared to last year (44% in 2010 versus 10% in 2009) – an issue that warrants further investigation and analysis to find out an answer for this increase in case-fatality ratio.

No doubt, the highly pathogenic avian influenza virus will continue to spread and pose a major challenge to human health. Therefore, the virus has to be considered a potentially serious pandemic threat as long as there is no proof that virus has not lost its strength for an efficient human-to-human transmission.

Update on outbreaks

in the Eastern Mediterranean Region

A(H5N1) in Egypt; CCHF and Dengue fever in Pakistan; Dengue fever in Yemen; and Kala-azar in southern Sudan

Current public health events of international concern

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

Avian influenza

| | |
|--------------|---------------------|
| Egypt | [119 (40), 33.6%] |
| Indonesia | [171 (141), 82.4 %] |
| Viet Nam | [119(59), 49.6%] |
| China | [40(26), 65%] |
| Global total | [516(306), 59.3%] |

Crimean-congo haemorrhagic fever

| | |
|----------|---------------|
| Pakistan | [45(3), 6.6%] |
|----------|---------------|

Cholera

| | |
|---------|-----------------------|
| Haiti | [148787*(3333), 2.2%] |
| 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 %]# |

Polio

| | |
|----------|-------------------|
| Congo | [184(85), 46.1 %] |
| Pakistan | [133(0)] |

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