

## Current major event

### Avian Influenza A (H5N1) in Egypt

The Ministry of Health and Population of Egypt reported 17 new human cases of avian influenza A (H5N1) to WHO in 2015. Since the first reported case in 2006, Egypt has so far reported 227 laboratory-confirmed cases of avian influenza A (H5N1) including 85 deaths (CFR 37.4%).

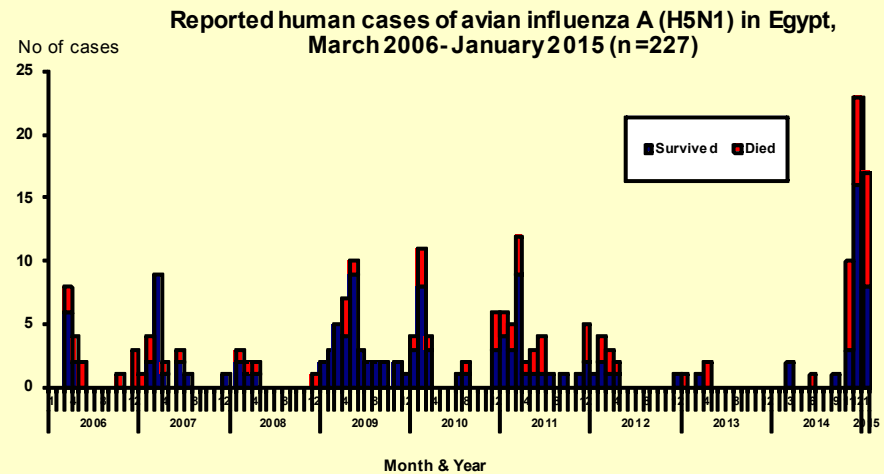
### Editorial note

This year, Egypt has reported 17 new human cases of avian influenza A (H5N1) including 9 associated deaths (CFR 52.9%). Ever since the first human infection of avian influenza A (H5N1) was reported in 2006 from Egypt, human infections continue to be reported sporadically. Since the month of November 2014, cases of avian influenza A (H5N1) have spiked in Egypt, almost throughout the country, but specially in Upper Egypt without any plausible explanation. Despite the fact that seasonal distribution of cases has been observed in the past (*please see the epi-curve*), it is not clear, why so many human infections have been reported at the same time and in many instances in the same geographic location.

Although the on-going field investigation carried out by the Ministry of Health and Population in Egypt has so far detected no human-to-human transmission, there are some cluster of cases reported during the current surge whose mode of exposure and contact history are not yet clearly defined.

The avian influenza A (H5N1) is a zoonotic infections, highly pathogenic, often causes serious outbreaks in domestic poultry does not usually infect humans. But the recent spike in human infections is indicative that the virus is circulating widely in poultry in the country and the control measures are not being effective.

Further investigation also needs to be done to better understand the current nature of the outbreak as well as transmissibility of the virus to see if the characteristic of the virus is changing. Since



**Age distribution of avian influenza A (H5N1) cases and deaths reported from Egypt, 2006-2015**

Age group	Cases	Deaths	CFR (%)
< 5 yrs	67	4	6.0
5 to < 15 yrs	40	7	17.5
15 to < 30 yrs	57	40	70.2
30 to < 45 yrs	46	26	56.5
45 yrs & >	17	8	47.1
<b>Total</b>	<b>227</b>	<b>85</b>	<b>37.4</b>

the emergence of avian influenza A (H5N1) virus, the pandemic potentials of the virus causing sustained human-to-human transmission continue to be studied as being novel and zoonotic, this virus was considered to be the next possible pandemic influenza virus.

The current increase of human infections need to be investigated further both from the human and animal health sector. A complete descriptive analysis of the cases along with the exposure history needs to be done to see if the transmission mode of the virus is changing and what type of exposure is resulting to current infection compared to what is known of how this virus spills over to humans from the poultry. In addition, it also needs to be studied how effective the surveillance system is in both the animal and human health sector in picking up the outbreaks in poultry as well as human infections.

The immediate measure should be to start an aggressive risk communication drive to limit transmission from infected poultry.

## Update on outbreaks

in the Eastern Mediterranean Region

**MERS-CoV** in Saudi Arabia and Oman; **Avian Influenza** in Egypt

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

### Avian Influenza A (H5N1): 2006-2015

Egypt [227 (85), 37.4%]

### MERS-CoV: 2012-2015

Saudi Arabia [836 (324), 38.8%]

Jordan [12 (6), 50%]

Oman [5 (3), 60%]

UAE [70 (8), 11.4%]

Kuwait [3 (1), 33.3%]

Tunisia [3 (1), 33.3%]

Qatar [9 (4), 44.4%]

Yemen [1 (1), 100%]

Egypt [1 (0), 0%]

Lebanon [1 (0), 0%]

Iran [5 (2), 40%]

### Ebola Virus Disease: 2014-2015

Guinea [2917 (1910), 65.5%]

Liberia [8622 (3686), 42.8%]

Sierra Leone [10518 (3199), 30.4%]

UK [1(0), 0%]

Nigeria [20 (8), 40%]

Senegal [1(0), 0%]

Spain [1(0), 0%]

USA [4(1), 25%]

Mali [8(6), 75%]

### Wild poliovirus: 2014-2015

Pakistan [306 (0), 0%]

Afghanistan [29(0), 0%]