

Current major event

Avian Influenza A (H5N1) in Egypt

Between February and March 2016, the Ministry of Health & Populations of Egypt reported 4 new human cases of avian influenza A (H5N1) infection to WHO. These are the new human cases reported in 2016 after the surge of human cases observed in 2015 in the country. With this, a total of 350 human cases of avian influenza A (H5N1) including 117 deaths (CFR: 33.4%) were reported in Egypt since 2006.

Editorial note

These were the first reported human cases of avian influenza A(H5N1) from Egypt in 2016. The field investigation conducted by the Ministry of Health & Populations of Egypt reveal (*Please see the table*) that all cases were female and have history of contact with infected poultry or contaminated environments including live poultry markets.

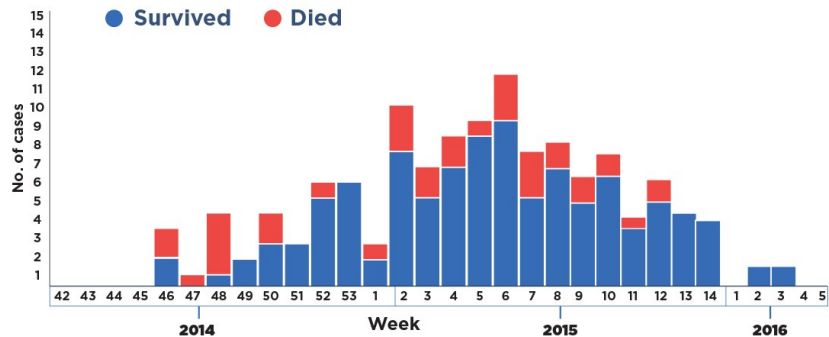
Since 2003, a total of 850 laboratory-confirmed cases of human infection with avian influenza A (H5N1) virus, including 449 deaths, have been reported to WHO from 16 countries. Egypt remains the second country after Indonesia reporting most of human cases of avian influenza A (H5N1) out of the global total.

The emergence of Highly Pathogenic Avian Influenza A (H5N1) virus in birds and poultry causing zoonotic infection led to pandemic concern during the past decade. Since the emergence of the virus, human infections have been sporadic with very little signs of human-to-human transmission patterns seen in the past. However, research showed that a small number of mutations in the virus might allow this avian virus to become easily transmissible and develop capacity to spread from human-to-humans, thus potentially becoming pandemic.

Egypt witnessed a unprecedented surge of human cases of avian influenza A (H5N1) virus in 2015 raising a heightened concern whether or not the virus has mutated and become easily transmissible. Later on, field investigations re-

DISTRIBUTION OF H5N1 CASES BY WEEK OF ONSET, EGYPT, 2014-2016 (UP TO 31 MARCH)

n=167



Age	Gender	Date of onset	Exposure to
1.5	Female	25/2/2016	Poultry
7	Female	04/03/2016	Live and dead backyard poultry
5	Female	24/02/2016	Live and dead backyard poultry
70	Female	08/03/2016	Investigation ongoing

vealed that although there was a new clade detected in the poultry virus, there was no epidemiological or virological evidence to suggest that the virus circulating in Egypt in poultry and in humans has changed or attained the ability to cause sustained human-to-human transmission.

Despite the fact the virus currently circulating in Egypt has not shown any sign of change, the pandemic threat associated with this virus has not yet subsided. Any small cluster, detected through passive disease or laboratory surveillance must be investigated thoroughly and the virus detected in the cluster must be analyzed phylogenetically in order to identify early any change or mutation that can render the virus more transmissible. No doubt, avian influenza viruses contribute to pandemic emergence, although it is difficult to accurately assess pandemic risk attributable to the currently circulating H5N1 virus. Nevertheless, enhanced vigilance must be maintained at all time.

Update on outbreaks

in the Eastern Mediterranean Region

MERS-CoV in Saudi Arabia; Avian Influen-

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

Avian Influenza : 2006-2016

Egypt (A/H5N1)	[350 (117), 33.4%]
Egypt (A/H9N2)	[3 (0)]

MERS-CoV: 2012-2015

Saudi Arabia	[1398 (598), 42.7%]
Jordan	[39 (12), 31%]
Oman	[7 (3), 42%]
UAE	[78 (11), 14.1%]
Kuwait	[3 (1), 33.3%]
Qatar	[14 (5), 35%]
Iran	[6 (2), 33.3%]

Lassa fever : 2015-16

Nigeria	[159(82), 51.5%]
Benin	[71(23),32.3%
Germany	[2(0)]
Togo	[2(0)]

Avian Influenza A (H7N9) : 2013-16

China	[752 (295),39.2%]
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Viral Haemorrhagic Fever (of unknown aetiology)

Sudan	[572 (105),18.1%]
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Wild poliovirus: 2014-16

Pakistan	[368 (0)]
Afghanistan	[52(0)]

Zika Virus Infection: 2007-16

60 countries and territories have reported transmission so far