World Health Organization
Regional Office for the Eastern Mediterranean

Weekly Epidemiological Monitor

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Current major events

New H5N1 (Case No. 51) in Egypt

The Ministry of Health and Population, Egypt has announced a new human case of avian influenza (case No. 51). The case is a 16-year-old female from Assiut Governorate. She is the first human case confirmed in the Governorate. Symptoms started on December 8, 2008. She was hospitalized in Abo Tig District Hospital and was referred to Assiut University Hospital on December 13, 2008. The case was diagnosed as a human case of avian influenza by PCR on December 15, 2008. The case had a recent history of contact with sick and dead poultry. The patient died on December 15, 2008.

The MOH&P has sent a response team to assist the local team with further investigation, risk assessments and control measures. Seven family contacts are being followed for signs of the disease.

Editorial note

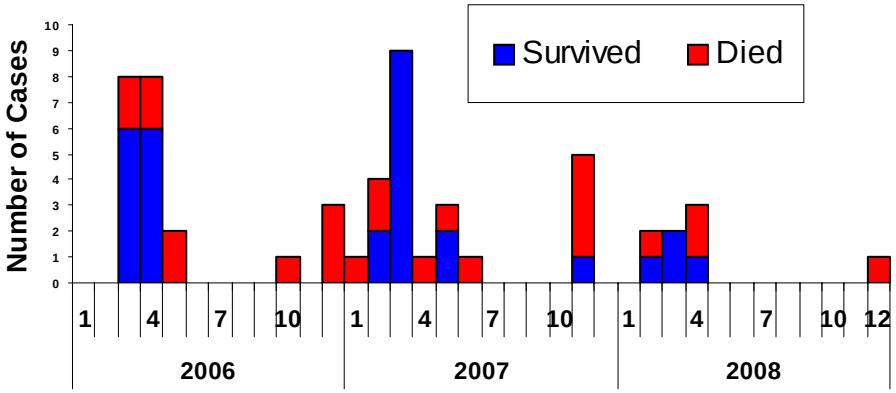
Twenty three out of a total of 51 human cases of avian influenza (AI) due to H5N1 virus reported in Egypt in the last three years were fatal (CFR 45%). Of the 51 cases, 35 (69%) were females. Forty-seven cases (92%) occurred among small backyard poultry owners while only three (6%) were among industrial farm workers; the source of exposure for one case (2%) could not be ascertained. The occurrence of human AI cases has been predictable and followed a seasonal pattern; the outbreak begins during winter months and ends by the end of spring.

Although it was anticipated and the risk factors for human AI in Egypt are known, it took relatively a long period to reach the diagnosis for this case. Physicians should be better prepared to pick up the human AI cases early, and timely initiate treatment. MOH&P, Egypt guidelines promote early diagnosis and prompt treatment with oseltamivir, including suspected case of human AI. However, additional factors that contributed to high case-fatality rates of human AI include late presentation of patients to health facilities and their denials of exposure to sick or dead poultry.

The control and risk reductions to infection of humans with H5N1 associated with back-yard poultry remains a challenge in Egypt. This is especially true in rural areas where poultry farming is deeply routed and raising poultry has cultural, nutritional, survival and economic significance.

The world remains at a high risk of a pandemic that may not necessarily be caused by H5N1 virus. The H5N1 virus has remained persistently active in two countries, Indonesia and Egypt. To-date, Egypt has managed to keep the CFR% of avian influenza low (45%) in the Country, compared to the global figure of 63.3%. There were fatal human AI cases among children less than 10 years of age in Egypt (N=20 case). A total of 391 cases of infection with H5N1 virus, including 247 deaths have been reported globally.

Reported Human Cases of H5N1, Egypt 2006-2008



H5N1 Virus

- Essentially birds' virus
- 10 different groups (clades) are known
- Four clades (0, 1, 2 and 7) infected humans
- Clade 2 viruses has 5 sub-clades and are the most widespread and diverse
- So far, sub-clades 2.1, 2.2, & 2.3 viruses have infected humans

Update on outbreaks

in the Eastern Mediterranean Region

Human Avian Influenza in Egypt **Dengue:** in Pakistan, Sudan. **Cholera:** in Iraq; Iran, and Afghanistan.

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

Avian influenza	
Egypt	[51 (23), **45%**]
Indonesia	[139 (113), **81.3%**]
AWD/Cholera	
South Africa	[1019 (12), **1.2%**]
Mozambique	[1454 (29), **1.99%**]
Afghanistan	[5403* (24), **0.4%**]
Iraq	[918 (11), **1.2 %**]
Zimbabwe	[20,896 (1123), **5.4%**]
Dengue fever	
Sudan	[68(?), ?%]
Pakistan	[10 (8 ?)]#
Acute Haemorrhagic fever syndrome	
DR Congo	[14 (9), **64.3%**]
Uganda	[5 (2), **40%**]
Sudan	[33 (14), **42.4%**]
Mali	[43 (2), **4.7 %**]
Zimbabwe	[1 (0), **0%**]

(=Suspected)*
CFR=Case-Fatality Rate
? = No data
***# =** Risk assessment ongoing. Of these suspected cases, 8 deaths were reported.*

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