FAOAIDEnews
Animal Influenza Disease Emergency

Situation Update 73
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HPAI outbreaks reported in this publication refer to officially confirmed cases only.
The information is compiled from the following sources: World Organisation for Animal Health (OIE), national governments and their ministries, and the European Commission (EC) – these sources are responsible for any errors or omissions.

FAO assists Jakarta with poultry market restructuring

Human infections with H5N1 highly pathogenic avian influenza (H5N1 HPAI) have occurred more frequently in the greater Jakarta area of Indonesia than any other area of the world. Pathogen amplification and the progressive accumulation of virus along the poultry market chain, that is, from poultry farms to live-bird markets, may be contributing to the higher human infection rate observed in greater Jakarta. To reduce H5N1 HPAI risk to humans (and to an extent to other animals too) following a cluster of human cases in Jakarta in January 2007, the DKI Jakarta provincial government decided to reduce the movement of live birds into Jakarta by issuing a ban on the entry of live birds within the city limits and organized a limited number of large relocation centres where poultry can be gathered and slaughtered [Regional Regulation No. 4/2007]. The government also banned the rearing of backyard poultry within the province, a move that reduces the localized infection foci that could be serving as hotspots for interaction between animals, caregivers and masses of consumers.

In Jakarta, and more generally in Indonesia, poultry production and the consequent marketing of live and slaughtered animals is predominantly private sector driven. After H5N1 HPAI struck the country, it became evident that the larger operators had fared better than the smaller ones and, to their dismay, had increased their market share at the expense of smaller businesses. This scenario created resistance among poultry producers, collectors and slaughterers to acquiesce to new government-imposed regulations because they viewed it as a means for the government and larger private companies to constrain their business prospects and long-term viability.

Historically, and in addition to the abovementioned, the smaller poultry-related operators have been much less willing to adapt to modern hygiene and sanitation standards, leading to unsafe poultry market practices in large, concentrated urban populations. With this in mind, the government is making special efforts to ensure that measures taken in the context of reducing HPAI are sensitive to the concerns of small-scale poultry actors as in the reorganization of the collection yards and slaughtering facilities in Jakarta as part of a poultry market restructuring agenda.

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With the assistance of CREATE, a local NGO, the Food and Agriculture Organization of the United Nations (FAO) assisted local administration officials to assess the preparedness and increase the competency of the different poultry relocation centres and to analyze their organizational and training needs. FAO proposed practical solutions through the development of training modules and standard operating procedures, and assisted in the implementation of the training and organization of individuals involved in poultry market restructuring.

Thanks to the support provided by the FAO programme in Indonesia, management staff of the poultry relocation centers in Jakarta have a better understanding of the needs of the collectors and slaughterers. They are now better prepared to handle the hundreds, if not thousands, of small collectors and slaughterers who will eventually make use of these facilities. Additionally, they will facilitate training and assist the collectors and slaughterers to operate the facilities and equipment in proper and efficient ways. The management will also ensure that the collectors and slaughterers abide by the biosecurity and food safety regulations. Standard operating procedures are now adapted to local requirements, thus resulting in optimization of facilities usage so that Jakarta consumers do not face supply disruptions or food safety problems.

This short essay is a summary version of a more comprehensive study conducted in Jakarta.
For more information on this subject, please contact James McGrane at James.McGrane@fao.org

FAO staffer receives USDA award for his work in Africa

“Agriculture is the foundation of manufacture and commerce” is inscribed in the logo-symbol of the United States Department of Agriculture’s certificate of appreciation awarded to Boubacar M. Seck, ECTAD Regional Coordinator and FAO IDENTIFY Regional Focal Point. The certificate of appreciation was awarded during the RESOLAB 4th Annual Coordination Meeting held in Bamako, Mali on 06-19 December 2010 for his leadership role in the development of a functional West Africa veterinary laboratory network.

The ECTAD team headquartered in Rome expresses its sincere and warm congratulations to Dr Seck for the USDA award and for the recognition it brings to the Food and Agriculture Organization of the United Nations in the African continent as a catalyst of change.

Village-based Biosecurity: Community Participation in Prevention and Control of H5N1 HPAI in South and West Sulawesi, Indonesia

Since 2006 the Indonesian Ministry of Agriculture (MoA), in collaboration with the Food and Agriculture Organization of the United Nations (FAO), has been developing a system of passive surveillance and village-based prevention and control of H5N1 highly pathogenic avian influenza (H5N1 HPAI) based on the Participatory Disease Surveillance and Response (PDSR) approach.

PDSR is driven by the active involvement of community members given that community participation is an essential element in HPAI prevention and control. Evidence suggests that many aspects of the way villagers live with, produce, trade and market poultry contribute to the ongoing transmission of HPAI in these village environments. A significant part of the work of a PDSR officer involves provision of education and extension to village community members to assist in the prevention of disease transmission. The prevention and control of HPAI should not be addressed on an individual disease-specific basis; therefore, the development and implementation of a village-based biosecurity education and communication (VBEC) programme could be complementary and helpful in promoting specific changes in husbandry practices that prevent disease transmission.

The VBEC programme began in August 2009 with a qualitative and quantitative sociocultural assessment in six pilot villages to allow better understanding of community understanding, beliefs and practices with regards to poultry keeping, poultry disease and its movements. Prior to a village-based workshop, an initial training for field workers from local NGOs together with local livestock services staff and community leaders was provided to enhance their capacity in community engagement plus a basic understanding of causes and movement of disease and how it may be prevented, which contributed to the development of realistic biosecurity action plans.

During this process the role of PDSR officers or local livestock services staff is to provide technical assistance and public awareness as well as dispelling misconceptions and ingrained cultural beliefs about how viruses move and how diseases may be prevented. This approach is acknowledged as bottom up, where the local community takes the initiative of working together to implement a series of HPAI prevention and control activities that are realistic and in line with local conditions. The resulting action plans were agreed in each village with the involvement of a district livestock services staff member to ensure continuity, feedback and technical soundness.

In response to the observation that the village team (consisting of district livestock services staff, community leaders and local NGOs field staff) had difficulty in applying effective methods in facilitation of community mobilization and training activities, a session of training of trainers was provided to ensure that the village team had the ability to facilitate information, education and communication (IEC) activities at the village level.

The IEC activities targeted existing community groups such as Posyandus (village integrated health services), religious and devotional groups, self-help and women's groups, churches and mosques, elementary, junior and high school students, and other miscellaneous community gatherings. In villages where commercial poultry producers exist, specific technical extension messages were provided including technical discussions covering management issues, poultry anatomy and practical biosecurity pertinent to the levels of production systems present. Organic matter composting demonstrations were also conducted to introduce a safe method for poultry carcass disposal.

As part of a communication strategy to support behavioral changes, a series of competitions were organized to encourage community participants to apply biosecurity practices that were specifically adapted to local conditions. These activities included competitions for best biosecurity practice in villages, competitions for hobby birds (crowing cocks) with avian influenza awareness and biosecurity themes. Biosecurity speech contests for housewives and biosecurity quizzes for elementary school students from each pilot village were also organized to allow village-based biosecurity volunteer teams to share their experiences. This helped provide inspiration for them to continue developing village-based efforts to improve poultry biosecurity and husbandry.

The ongoing VBEC programme activities have shown a need for communication materials without the use of highly technical language. Four biosecurity educational films were produced. These were aimed at owners of backyard chickens, hobby chickens and village-based producers of broilers and layers. The short educational films illustrated common village practices associated with poultry; showing with computer-enabled animations how viruses are able to move and spread in villages, and provide practical solutions to prevent or control virus spread. Finally, the programme developed a VBEC documentary with images and narration of the village-based biosecurity action plan creation process. The film focused on village field activities including meetings, training activities and competitions, as well as interviews with key partners from government, village authorities, local NGO's and respected community members.

"Spread of HPAI knows no geographical boundaries; hence close cooperation between neighboring villages is crucial to the control of the disease as a regional approach"

For more information on Indonesian village-based programmes, email James.McGrane@fao.org

MOST RECENT H5N1 AI OUTBREAKS 2006-2010

Note: This list has been compiled on the basis of information up to 31 December 2010.

2010

December	China (Hong Kong), Egypt, Japan, Korea (Republic of), Viet Nam
November	Indonesia
October	Nepal
June	Bangladesh, Russian Federation
May	China, Israel, **Mongolia**
April	Cambodia, Lao PDR
March	Bhutan, **Bulgaria**, Myanmar, Romania
January	India

2009

March	Germany

2008

November	Thailand
September	Togo
July	Nigeria
June	Pakistan
May	United Kingdom
March	Turkey
February	**Switzerland**, Ukraine
January	Saudi Arabia

2007

December	Benin, Iran, Poland
October	Afghanistan
August	France
July	Czech Republic
June	Ghana, Malaysia
April	Kuwait
January	Côte d'Ivoire, Hungary

2006

August	Sudan
July	**Spain**
June	Niger
May	Burkina Faso, Denmark
April	Djibouti, Sweden, West Bank & Gaza Strip
March	Albania, **Austria**, Azerbaijan, Cameroon, **Croatia**, **Greece**, Jordan, Kazakhstan, Serbia, **Slovenia**
February	**Bosnia-Herzegovina**, **Georgia**, Iraq, **Italy**, **Slovakia**

***Green**: areas which never had reported outbreaks in poultry*

Sources: World Organisation for Animal Health (OIE), European Commission (EC), FAO and national Governments

AT A GLANCE

The latest HPAI outbreaks for the period 1 – 31 December 2010

Note AIDEnews publishes reports of **confirmed HPAI cases** using the following sources: OIE, European Commission, FAO and national governments.

AFRICA

Egypt

A total of 27 H5 HPAI positive cases were reported in 11 governorates during 1 - 31 December 2010 (number of outbreaks in parentheses): Alexandria (1), Dakahlia (6), Fayoum (1), Gharbia (4), Kafr-el-sheikh (2), Luxor (2), Menoufia (2), Minya (3), Qalyoubia (4) Sharqia (1), Sixth of October (1). A total of 5,627 birds were culled. All of the outbreaks were in backyard poultry, outbreaks occurred in a turkey flock in Dakahlia and a duck flock in Qalyoubia even though they had been vaccinated. In another outbreak in Dakahlia, the poultry owner had domestic cats in contact with the poultry, and all the cats died when the outbreak started in the poultry.

ASIA

Japan

H5N1 AI viruses (virulent type) were isolated from wild birds in three locations during December 2010: a Mute Swan (*Cygnus olor*) died on 19 December 2010 in a zoo in Takaoka City, Toyama Prefecture; a Tundra Swan (*Cygnus columbianus*) was found dead on 4 December 2010 at a water bird sanctuary in Yonago City, Tottori Prefecture within a 10 km radius of the outbreak in Shimane Prefecture which occurred on 29 November 2010; a hooded crane (*Grus monacha*) that was sheltered at Izumi crane migration grounds, Izumi City, Kagoshima Prefecture on 18 December 2010 and which died on 20 December 2010. As of 11 December 2010, a total of 13,006 cranes were wintering in the area including 11,953 hooded cranes. The virus isolated from the crane was closely related to the viruses isolated from wild bird faeces in Onuma Lake, Hokkaido Prefecture in October 2010, a poultry farm in Yasugi City, Shimane Prefecture in November 2010, and wild birds in Takaoka City, Toyama Prefecture and Yonago City, Tottori Prefecture in December 2010.

Hong Kong SAR, China

A chicken carcass found in Sha Lo Wan Bay, Lantau Island on 18 December 2010 tested positive for H5N1 AI.

Indonesia

The Participatory Disease Surveillance and Response (PDSR) programme through 33 Local Disease Control Centres covers 71,427 villages in 85 percent of Indonesia's 448 districts and municipalities in 29 of its 33 provinces. During November 2010, PDSR conducted surveillance in 1,608 villages (2.3 percent). The overall HPAI incidence was 0.6 infected villages per 1,000 villages under surveillance.

Korea, the Republic of

There were H5N1 HPAI outbreaks confirmed in a duck farm in Iksan City, Jeollabuk-do and a chicken farm in Cheonan City, Chungcheongnam-do. Meanwhile, a total of 24 wild birds were found infected with H5N1 AI in four different provinces: 22 mallard ducks (*Anas platyrhynchos*, Gyeongsangnam-do, Jeollabuk-do, Jeollanam-do), 1 eagle owl (*Bubo bubo*, Chungcheongnam-do).

Nepal

An outbreak of H5N1 HPAI occurred on 25 October 2010 and was reported to OIE on 5 December 2010. The outbreak was in a commercial poultry farm in Mangalpur-3, Chitwan District, Narayani Zone, and a total of 66 birds out of 11,503 birds died, with the remainder being culled.

Viet Nam

Outbreaks of H5N1 HPAI occurred on 2 December 2010 in a household in Tan An Commune Ngoc Hien district, Ca Mau Province, and a total of 12 chickens out of 78 died.

SUMMARY OF CONFIRMED HPAI OUTBREAKS

(As of 31 December 2010)

Sources: OIE, European Commission (EC), FAO and national governments – WHO for human cases/deaths

Note: H5N1 unless otherwise indicated. Highlighted countries indicate those in which there has been only one officially confirmed H5N1 outbreak or occurrence. Dates of the last outbreak within this year are in bold.

AFRICA	First outbreak	Latest outbreak	Animals affected to date	Human cases / deaths to date
Benin	7 November 2007	15 December 2007	Domestic poultry	-
Burkina Faso	1 March 2006	20 May 2006	Domestic poultry - wild birds	-
Cameroon	21 February 2006	28 March 2006	Domestic poultry – wild birds	-
Côte d'Ivoire	31 March 2006	31 January 2007	Domestic poultry – wild birds	-
Djibouti	6 April 2006	6 April 2006	Domestic poultry	1 / 0
Egypt	17 February 2006	**25 December 2010**	Domestic poultry – wild birds – donkeys*	**115 / 38**
Ghana	14 April 2007	13 June 2007	Domestic poultry	-
Niger	6 February 2006	1 June 2006	Domestic poultry	-
Nigeria	16 January 2006	22 July 2008	Domestic poultry – wild birds	1 / 1
Sudan	25 March 2006	4 August 2006	Domestic poultry	-
Togo	6 June 2007	8 September 2008	Domestic poultry	-

ASIA	First outbreak	Latest outbreak	Animals affected to date	Human cases / deaths to date
Afghanistan	2 March 2006	2 October 2007	Domestic poultry – wild birds	-
Bangladesh	5 February 2007	**19 June 2010**	Domestic poultry	1 / 0
Bhutan	**18 February 2010**	**14 March 2010**	Domestic poultry	-
Cambodia	12 January 2004	**22 April 2010**	Domestic poultry – wild birds	**10 / 8**
China	20 January 2004	**9 May 2010** wild birds	Domestic poultry – wild birds	**40 / 26**
China (Hong Kong SAR)	19 January 2004	**18 December 2010**	Domestic poultry – Wild birds	
India	27 January 2006	**30 January 2010**	Domestic poultry	-
Indonesia	2 February 2004	**November 2010**	Domestic poultry – pigs (with no clinical signs)	**171/ 141**
Japan	28 December 2003	**18 December 2010** hooded crane	Domestic poultry – wild birds – raccoons (with no clinical signs)	-
Kazakhstan	22 July 2005	10 March 2006	Domestic poultry – wild birds	-
Korea, Rep. of	10 December 2003	**30 December 2010**	Domestic poultry – wild birds	-
Lao PDR	15 January 2004	**27 April 2010**	Domestic poultry	2 / 2
Malaysia	7 August 2004	2 June 2007	Domestic poultry – wild birds	-
Mongolia	10 August 2005	**3 May 2010**	Wild birds	-
Myanmar	8 March 2006	**1 March 2010**	Domestic poultry	1 / 0
Nepal	8 January 2009	**25 October 2010**	Domestic poultry	-
Pakistan	23 February 2006	17 June 2008	Domestic poultry – wild birds	3 / 1
Thailand	23 January 2004	10 November 2008	Domestic poultry – wild birds – tiger	25 / 17
Viet Nam	9 January 2004	**2 December 2010**	Domestic poultry	**119/ 59**

NEAR EAST	First outbreak	Latest outbreak	Animals affected to date	Human cases / deaths to date
Iran	2 February 2006	10 December 2007	Domestic poultry - wild birds	-
Iraq	18 January 2006	1 February 2006	Domestic poultry – wild birds	**3 / 2**
Israel	16 March 2006	**2 May 2010**	Domestic poultry – Emu (zoo)	-
Jordan	23 March 2006	23 March 2006	Domestic poultry	-
Kuwait	23 February 2007	20 April 2007	Domestic poultry – wild birds - zoo birds	-
Saudi Arabia	12 March 2007	29 January 2008	Domestic poultry	-
West Bank & Gaza Strip	21 March 2006	2 April 2006	Domestic poultry	-

* Journal of Biomedical Science : http://www.jbiomedsci.com/content/17/1/25

EUROPE	First outbreak	Latest outbreak	Animals affected to date	Human cases / deaths to date
Albania	16 February 2006	9 March 2006	Domestic poultry	-
Austria	10 February 2006	22 March 2006	Wild birds – cats	-
Azerbaijan	2 February 2006	18 March 2006	Wild birds – domestic poultry – dogs	**8 / 5**
Bosnia-Herzegovina	16 February 2006	16 February 2006	Wild birds	-
Bulgaria	31 January 2006	**29 March 2010**	Wild birds	-
Croatia	21 October 2005	24 March 2006	Wild birds	-
Czech Republic	20 March 2006	11 July 2007	Wild birds – domestic poultry	-
Denmark	12 March 2006	22 May 2006	Wild birds – domestic poultry	-
France	17 February 2006	14 August 2007	Wild birds – domestic poultry	-
Georgia	23 February 2006	23 February 2006	Wild birds	-
Germany	8 February 2006	10 January 2009 mallard, wild	Wild birds – domestic poultry – cats – stone marten	-
Greece	30 January 2006	27 March 2006	Wild birds	-
Hungary	4 February 2006	23 January 2007	Wild birds – domestic poultry	-
Italy	1 February 2006	19 February 2006	Wild birds	-
Poland	2 March 2006	22 December 2007	Wild birds – domestic poultry	-
Romania	7 October 2005	**27 March 2010**	Wild birds – domestic poultry – cat	-
Russian Federation	15 July 2005	**5 June 2010** wild birds	Domestic poultry – wild birds	-
Serbia	28 February 2006	16 March 2006	Wild birds – domestic poultry	-
Slovakia	17 February 2006	18 February 2006	Wild birds	-
Slovenia	9 February 2006	25 March 2006	Wild birds	-
Spain	7 July 2006	9 October 2009 (H7)	poultry	-
Sweden	28 February 2006	26 April 2006	Wild birds – domestic poultry - game birds - mink	-
Switzerland	26 February 2006	22 February 2008	Wild birds	-
Turkey	1 October 2005	9 March 2008	Domestic poultry – wild birds	**12 / 4**
Ukraine	2 December 2005	11 February 2008	Wild birds – domestic poultry – zoo birds	-
United Kingdom	30 March 2006	22 May 2008 (H7N7)	Wild birds – domestic poultry	-