FAOAIDEnews
Animal Influenza Disease Emergency

Situation Update 78
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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.

New report highlights FAO's global efforts to combat avian influenza and other animal diseases

Increase in HPAI in 2010

In 2010, the number of countries where H5N1 HPAI was reported increased to 18 (from 12 in 2009), and the overall number of reported outbreaks worldwide also increased. The disease was reintroduced to five countries, including Bulgaria and Romania, which were the first disease events in Europe since 2008. Human fatalities continued to occur. Thus, H5N1 HPAI continues to be a major concern, including the risk of human infection.

New disease threats

During 2010, major animal diseases continued to spread in different regions of the world, disrupting livestock production, rural economies and people's livelihoods and food security. This has been largely due to the limited capacity of veterinary services to contain animal diseases in, and to disease drivers such as poor husbandry practices, high intensification of animal production, increased trade of animal and animal products and intensified contact between animal, human and wildlife populations. Significant disease events in 2010 included: the spread of African swine fever (ASF) in eastern Europe, foot-and-mouth disease (FMD) in east Asia, *peste des petit ruminants* (PPR) in eastern Africa, and porcine reproductive and respiratory syndrome (PRRS) in Asia, together with some diseases that affect human health directly, such as anthrax, brucellosis and rabies.

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Key principles

In addition to analyzing global progress in addressing HPAI, the report focuses on the key principles utilized in prevention, control and elimination of other transboundary animal diseases (TADs) and emerging infectious diseases (EIDs):

- The move of the international animal health and donor community away from disease specific interventions to an integrated, multidisciplinary approach in developing sustainable animal health systems at country/regional/global levels.
- The crucial Public Good role of veterinary services, needing development of skills, technical/management competencies and funding to effectively function and achieve public good outcomes; in close cooperation with public health authorities.
- The level of commitment among the livestock/poultry sectors and governments to the elimination of pathogens of high impact; and the level of resources to implement effective disease prevention and elimination programmes.
- The increasing emphasis on regional and global projects, reflecting the importance attached to the transboundary nature of diseases, and requiring cross-border cooperation and collaboration in control and prevention.
- The enhancement in quality of public and private, veterinary and animal production services, many of which have limited capacity to identify and respond to cases of infection, fully understand the factors which influence disease emergency maintenance and spread, and implement improvements in production and marketing systems, including inspection and compliance.
- The need to understand the multiple factors which increase the risk of disease incursion and spread, such as increased trade of animal and animal products, and intensified contact between animal, human and wildlife populations.
- The socio-economic impact of disease; and the importance in understanding the roles and motivations of farmers, (including differing perspectives of women and men), traders and consumers, and how they respond to risk, and in prevention and control measure compliance.

The 4th Report on the Global Programme for the Prevention and Control of highly pathogenic avian influenza (HPAI), 2010 highlights achievements and directions in combating HPAI, animal diseases which have an impact on livelihoods and food security, and in the case of zoonotic diseases, those which threaten human health.

FAO and Max Planck Institute take on species swapping diseases

Focus on interactions between wild animals, livestock, and human populations to reduce risks, strengthen responses

FAO and the German Max Planck Institute are joining forces to study species-swapping diseases that move back and forth between wild animals and domestic livestock and, in some cases, jump to human victims.

In today's interconnected world, population growth, modern transportation and increased global trade in animals and animal products have vastly accelerated the spread of zoonoses - species jumping diseases - capable of wreaking major impacts on farmers' livelihoods and human health alike. Pandemic (H1N1) 2009 and the H5N1 highly pathogenic avian influenza are but two recent examples.

A memorandum of understanding signed today by FAO and the Max-Planck-Institute for Ornithology, based in Radolfzell, Germany, establishes a strategic partnership aimed at combining the organizations' expertise and resources to tackle this problem.

A key goal of the partnership will be to determine which agroecological landscapes represent the greatest risk for disease transmission among human, livestock, and wild animal populations.

Among other things, the agreement also commits FAO and the Institute to helping countries strengthen their national capacity to balance preservation of natural resources and biodiversity with and expansion and intensification of agricultural production to ensure food security.

Strategic partnership, holistic vision

"Combining the Institute's extensive trove of data on wildlife movements with FAO data on livestock production and landscape changes due to agriculture, forestry and urbanisation, will permit a new level of insight into animal-human interactions, conservation priorities, and more effective management of and response to health risks," said Martin Wikelski, director of the Max Planck Institute for Ornithology.

FAO Deputy Director-General for Knowledge Ann Tutwiler added: "Disease dynamics can no longer be considered in isolation within the livestock sector but must be placed into a broader context of sustainable agriculture, socio-economic development, environment protection and sustainability."

"This is why FAO is moving forward with the 'One Health' approach that emphasizes a multidisciplinary collaboration in solving challenging health issues arising from the livestock-wildlife-human-ecosystem interfaces -- working closely with partners like the Max Planck Institute," Tutwiler said.

About FAO and the Institute

The Department of Migration and Immuno-ecology of the Max Planck Institute for Ornithology has far-reaching expertise in investigating animal movements on a global scale, including the creation of its online, open-access database on world animal movements, MoveBank.

FAO has long worked to safeguard animal and veterinary public health, maintain animal genetic diversity, and minimize the environmental impact of livestock production. The UN agency has played a leading role in helping countries cope with outbreaks of zoonotic and non-zoonotic animal diseases, including understanding and addressing the factors leading to their emergence. This includes work on avian influenza, A/H1N1 influenza, rift valley fever, and African sleeping sickness as well as the international effort to eradicate rinderpest.

For more information about this news

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MOST RECENT H5N1 AI OUTBREAKS 2006-2011

Note: This list has been compiled on the basis of information up to 31 May 2011.

2011	
May	Bangladesh, Egypt, Korea (Republic of), Viet Nam
April	Indonesia, Israel (Jordan Valley), **Mongolia**
March	China (Hong Kong SAR), India, Japan, Myanmar
February	West Bank
January	Cambodia
2010	
October	Nepal
June	Russian Federation
May	China
April	Lao PDR
March	Bhutan, **Bulgaria**, Romania
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
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 May 2011

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

AFRICA

Egypt

A total of 43 H5 HPAI positive cases were reported in 14 governorates: Alexandria (1), Behera (2), Beni Suef (3), Dakahila (3), Damiyatta (1), Fayoum (3), Gharbia (1), Giza (1), Port Said (1), Qalyubia (10), Menoufia (10), Minya (2), Qena (1) and Sharqia (4) Governorates (number of outbreaks in brackets). More than 115 000 birds have died or been culled (more than six times the previous month). Of the 43 outbreaks, 34 were in backyard poultry (chickens, ducks, geese and turkeys), 7 were in commercial farms (chicken, turkey or quail) and 2 were detected in ducks during active live bird market surveillance. Within the 34 outbreaks in backyard holdings, two households were reported to be vaccinated; while all but one commercial farm was reported to be vaccinated. HPAI vaccines imported for Egypt undergo batch evaluation at the Central Laboratory for Evaluation of Veterinary Biologics (CLEVB, Cairo) to assure their quality. In addition, the Government of Egypt is reviewing vaccine efficacy against field viruses currently circulating in Egypt.

ASIA

Bangladesh

There were two H5N1 HPAI outbreaks reported both in Narayanganj District, Dhaka Division in commercial poultry farms. A total of 184 birds died and 8 086 were destroyed.

Indonesia

The Participatory Disease Surveillance and Response (PDSR) programme through 33 Local Disease Control Centres covers 71 758 villages in 85 percent of Indonesia's 448 districts and municipalities in 29 of its 33 provinces. During April 2011, PDSR conducted surveillance in 2 131 villages (3 percent). The overall HPAI incidence was 2.8 infected villages per 1 000 villages under surveillance. This represents a slight increase in incidence of HPAI from March 2011. In Indonesia genetic and antigenic analyses of a sample of H5N1 HPAI virus isolates has been conducted to investigate the likely suitability of currently available vaccines and identify candidates for future poultry vaccine production.

Korea, the Republic of

Another outbreak of H5N1 HPAI occurred on 16 May 2011 in a layer farm with 15 800 chickens in Yeoungcheon-gun (District), Gyeongsangbuk-do (Province).

Viet Nam

H5N1 HPAI outbreaks in two provinces were reported in: the north east province of Lang Son and the Mekong River Delta province of Vinh Long*. A total of 2 107 birds have died or been destroyed. (* denotes multiple outbreaks). On 6 June 2011, the Ministry of Agriculture and Rural Development (MARD) announced that it will suspend the first round vaccination of 2011 in most of parts of the country following their research findings showing that the current H5N1 vaccines used for H5N1 HPAI in Viet Nam are not fully effective against all viruses in clade 2.3.2. In the southern provinces

between Ho Chi Minh City and Ca Mau provinces, clade 1 can still be found. Therefore, in defined key areas in these 13 provinces, the current vaccines can be used to prevent outbreaks due to clade 1. Clinical surveillance in the field will be enhanced, and samples from any suspected outbreak will be tested at the laboratory.

SUMMARY OF CONFIRMED HPAI OUTBREAKS
(As of 31 May 2011)

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	**30 May 2011**	Domestic poultry – wild birds – donkeys	**144 / 48**
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
South Africa	1 February 2011	21 April 2011 (H5N2, PCR H5 positive)	Ostrich	-
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	**8 May 2011**	Domestic poultry	**3 / 0**
Bhutan	18 February 2010	14 March 2010	Domestic poultry	-
Cambodia	12 January 2004	**28 January 2011**	Domestic poultry – wild birds	**15 / 13**
China	20 January 2004	9 May 2010 wild birds	Domestic poultry – wild birds	40 / 26
China (Hong Kong SAR)	19 January 2004	**1 March 2011**	Domestic poultry – Wild birds	
India	27 January 2006	**4 March 2011**	Domestic poultry	-
Indonesia	2 February 2004	**May 2011**	Domestic poultry – pigs (with no clinical signs)	**176 / 145**
Japan	28 December 2003	**16 March 2011**	Domestic poultry – wild birds – raccoons (no clinical signs)	-
Kazakhstan	22 July 2005	10 March 2006	Domestic poultry – wild birds	-
Korea, Rep. of	10 December 2003	**16May 2011**	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	**5 April 2011**	Wild birds	-
Myanmar	8 March 2006	**16 March 2011**	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	**20 May 2011**	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	**6 April 2011** (Jordan Valley)	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	**27 February 2011**	Domestic poultry	-

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	-