



Overview of the HPAI (H5N1) situation in the world – December 2007

HPAI outbreaks in poultry and other avian species were particularly high between January and April 2007, with a peak in March, and outbreaks were concentrated mainly in Asia and Africa. From May onwards, the number of cases gradually declined until the end of September, then started rising again during November and December 2007, when there were 12 countries with outbreaks reported (Bangladesh, Benin, China, Egypt, Indonesia, Nigeria, Myanmar, Poland, Romania, Saudi Arabia, United Kingdom and Viet Nam).

FAO has played a lead role in efforts to tackle avian influenza in poultry, in partnership with veterinary services worldwide, the World Organisation for Animal Health (OIE) and the World Health Organization (WHO). With FAO's assistance, more than 130 countries have been able to increase awareness and adopt appropriate measures to prevent, control and eradicate the disease.

A total of 61 countries in Asia, Europe and Africa have been affected by HPAI (H5N1) since the beginning of the epidemic in animals. Of these, 30 have experienced outbreaks during 2007, five of which reported outbreaks for the first time: Bangladesh, Benin, Ghana, Saudi Arabia and Togo. Except for a few outbreaks in wild birds (mainly in Hong Kong and Europe), most of the confirmed outbreaks have been in domestic poultry, including diverse species such as chickens, turkeys, geese, ducks and quails. Regarding human cases, WHO has reported a total of 74 cases (49 fatal) in seven countries in 2007 (Cambodia, China, Egypt, Indonesia, Lao People's Democratic Republic, Nigeria and Viet Nam).

Indonesia is still experiencing a high number of outbreaks of HPAI type H5N1 in poultry. The high figure of reported cases for Indonesia in 2007 is largely due to the roll-out of a 'participatory disease search' (PDS) programme which actively looks for the infection in backyard village-type poultry production environments. The programme is supported by FAO and is operating in 162 districts and nine provinces. In terms of the human population, Indonesia has reported 38 cases of HPAI (H5N1) infection, 33 of them fatal, in 2007. In Asia, the virus is actively circulating in some hotspots. Outbreaks in poultry have been reported repeatedly by Viet Nam, mainly in duck production systems. A fifth epizootic wave of HPAI (H5N1) was reported early May in poultry in 22 Vietnamese provinces. The disease appears enzootic in Bangladesh. Infections continued also in, Pakistan, China and Afghanistan. In China, HPAI outbreaks were reported in Tibet (March), and the provinces of Hunan (May) and Guangdong (September), while the virus was isolated from different locations in southern China (Fujian, Guangdong, Hunan, Hubei, Sichuan and Chongqing) in March and April through routine surveillance activities. Wild bird deaths were reported in Hong Kong but not on mainland China.

In the Middle East, Saudi Arabia reported a first outbreak of HPAI H5N1 in March, and several outbreaks in November in commercial poultry farms in Riyadh.

In Africa, HPAI (H5N1) is now considered endemic in Egypt and possibly in Nigeria. Several countries in West, Central, South and North Africa are at risk of becoming infected and early warning, surveillance and preventive measures should urgently be taken. In Nigeria, 36 states and the Federal Capital Territory have been affected by HPAI (H5N1) since February 2006; nevertheless, only seven states reportedly had active disease in October 2007. Between March and September 2007, Egypt reported outbreaks of HPAI (H5N1) mainly in backyard units, with few reported in commercial poultry farms. In 2007, Benin and Togo reported outbreaks of HPAI (H5N1) for the first time.

In Europe, Russia has experienced outbreaks of HPAI (H5N1) in poultry throughout 2007. Germany reported outbreaks in poultry (ducks and geese) and several cases in wild birds during the European summer. Other countries in Europe that reported outbreaks in 2007: Czech Republic (poultry and wild birds), France (wild birds), Hungary (geese), Poland (poultry), Romania (poultry) and United Kingdom (poultry).

A preliminary global analysis of HPAI (H5N1) situation between January and December 2007 indicates fewer outbreaks and fewer infected countries compared to the same period in 2006 (see Table 1). Increased awareness

and the improvement of disease surveillance permitted countries such as India, Romania, Malaysia or Turkey to successfully detect and control the disease (see Table 2). Nevertheless, the infection persists in three continents (Asia, Africa and Europe), as does the risk for those countries that either successfully controlled outbreaks in the past or have never been affected. The evolution of infection in countries that reported cases in both 2006 and 2007 is shown in Table 2.

In conclusion, in 2007 there has been an improvement in the general HPAI (H5N1) situation worldwide, but there is still a risk of recurrence and spread of the infection, and the disease is becoming enzootic in some regions.

Table 1 Number of countries infected in 2006 and 2007

Continent	2006	2007*
Africa	9	5 (2)
Asia/Middle East	22	17 (14)
Europe	23	8 (8)

* as of 10 December

() countries declaring infection in both 2006 and 2007

Table 2 Evolution in the number of outbreaks between 2006 and 2007

Continent	Country	Change*
Africa	Egypt	↑↑
	Nigeria	≈
	<i>Total for the region</i>	↓
Asia	Afghanistan	≈
	Cambodia	≈
	China	↓
	India	↓↓
	Indonesia	↑↑
	Korea, Republic of	≈
	Laos	≈
	Malaysia	↓↓
	Myanmar	↑↑
	Pakistan	↑
	Thailand	≈
	Turkey	↓↓
	Viet Nam	↑↑
	<i>Total for the region</i>	≈
Europe	Czech Republic	↓↓
	France	↓↓
	Germany	↓↓
	Hungary	↓↓
	Poland	**
	Romania	↓↓
	Russian Federation	≈
	United Kingdom	**
	<i>Total for the region</i>	↓↓
	TOTAL	↓

* as of 10 December 2007

** in 2007 Poland and UK reported HPAI in poultry for the first time. In 2006, there had been outbreaks in wild birds only.

↑ increase

↓ decrease

≈ no change