

Avian influenza



October 2006

Preventing the spread of avian influenza

The recent spread of **highly pathogenic** avian influenza from Asia to the west has provoked great concern in the EU and worldwide. This disease can have devastating consequences for the health of birds (wild and domestic) and can sometimes pose a threat to human health too.

In response to the heightened risk of avian flu, the EU has increased **preventive and control measures** to ensure early detection of infected birds and help contain the disease in the event of an outbreak. EU legislation in this area has been complemented by **emergency measures** to guarantee a **swift, efficient and coherent response** to avian influenza outbreaks.

CONTEXT AND NEED FOR EUROPEAN ACTION

What is avian influenza?

- Avian influenza (also named "avian flu" or "bird flu") is a highly contagious viral disease which occurs **primarily in poultry and other birds**.
- There are many different types of avian influenza viruses. Most of them are "**low pathogenic**", meaning that they do not cause serious disease in birds. However, some strains are "**highly pathogenic**", which means that they have more severe symptoms, are easily transmitted and can cause major epidemics in poultry and other birds. Sometimes, low pathogenic strains can mutate into highly pathogenic viruses.
- The **Asian H5N1 strain** of avian influenza is the virus currently responsible for many outbreaks worldwide. It spreads very rapidly amongst birds, causing serious disease with a high mortality rate in the animals affected. On **rare occasions**, following close contact with infected birds, **humans and other animals** can also contract the virus (see box).
- Wild birds often carry avian influenza viruses without showing any symptoms, and are considered to be the main "reservoirs" of avian flu. Evidence suggests **wild birds** often introduce the virus into an area, transmitting the disease either through **direct contact** with other birds or indirectly by contaminating soil and water with **infected faeces**. There has been increasing evidence

that migratory wild birds affected by the disease have contributed to the global spread of the H5N1 virus over long distances, for example, **from Asia to Europe**.

How has the spread of H5N1 avian influenza developed?

- The first outbreaks of the highly pathogenic strain of H5N1 avian influenza were actively reported in **South-East Asia** in 2003, although the virus was most likely to have been circulating in the region since **as early as 1996**. Avian flu is still endemic in this region and eradication is proving extremely difficult.
- Starting in **spring 2005**, the virus **spread northwards**, affecting birds in northern China, Mongolia, Russia and Kazakhstan.
- By the **end of 2005**, it was clear that the Asian strain of the H5N1 virus had also arrived in **Europe**, with Croatia, Romania, Turkey, Ukraine and the European part of Russia all affected by the virus to varying extents. Many **African and Middle Eastern countries** also began reporting confirmed cases of H5N1 avian influenza in the **first half of 2006**.
- **Early 2006** saw a significant outbreak of the virus in domestic poultry in **Turkey**, and by **February 2006**, the disease was also being reported in wild birds in a number of **EU Member States**, Bulgaria and other Balkan countries.

There have been outbreaks of H5N1 in poultry in some EU Member States but, thanks to the strong EU eradication and control measures in place, these were **quickly contained**.

Does avian influenza affect food safety?

- Poultry meat and eggs in the EU are **safe to eat**.
- Very **specific measures** are in place to protect domestic poultry and to prevent infected birds entering the food chain.
- In any case, **thorough cooking** ensures that poultry meat and eggs are free of any virus.

What impact does avian influenza have on the economy?

- A decline in the consumption of poultry products as a result of serious concerns over food safety can have significant implications for the **meat and livestock industry**. The 2003 outbreak of another highly pathogenic avian flu (H7N7 virus) in **the Netherlands** led to the destruction of around 30 million birds and direct economic costs estimated at more than **€150 million**.
- Avian influenza has dealt a significant blow to the economy of certain South-East Asian countries in which the disease is endemic. Following the 2003-2004 outbreaks of highly pathogenic H5N1 bird flu, the **total losses in GDP** as a result of damage to the poultry sector in **Asia** amounted to almost **€8 billion**.

What are the EU's aims in its fight against avian influenza?

- The EU aims to **prevent and immediately identify outbreaks** of avian influenza. In the event of an outbreak, the aim is to **contain the spread of the disease** as quickly as possible. In addition, the EU seeks to **mitigate the potential economic impact** of outbreaks.

- Working closely together with non-EU countries and international organisations, the EU aims to reduce the global threat and problem of highly pathogenic avian influenza. It provides **financial assistance** to the worst affected countries, and shares its **expertise** with partners across the globe. The EU is also carrying out research to develop new methods to counter the effects of the avian influenza virus.
- With up-to-date reports and detailed **information on precautionary measures**, the EU aims to keep the public well informed about the potential risks of avian influenza.

What is the added value of EU-wide action against avian influenza?

- Since avian influenza does not respect borders, a **consolidated strategy** based on cooperation between all Member States is far more efficient and effective than a national approach.
- **Harmonised legislation**, enforced in each of the Member States, guarantees a high degree of **preparedness** for avian influenza outbreaks and ensures equal standards of protection for EU citizens. It allows for effective **cooperation** between Member States on **disease prevention and control measures**, such as restrictions on trade in live birds.
- **Rapid communication and decision-making bodies** such as the Standing Committee on the Food Chain and Animal Health, mean that all necessary measures can be taken quickly and allow a prompt and efficient reaction to new outbreaks.



Avian influenza and human health

- Avian flu is primarily a bird disease which does not easily cross from birds to humans. However, on **rare occasions**, following close contact with infected birds, humans and other animals (such as cats) can be infected. Some **250 human cases** of highly pathogenic H5N1 were confirmed in several regions around the world between January 2003 and September 2006. Approximately half of the people infected died, with most deaths occurring in **South-East Asia** (Indonesia, Vietnam, Thailand and China). No human case of H5N1 has been reported in the EU.
- Until now, there has been no sustained human-to-human transmission of the highly pathogenic H5N1 virus. However, there is a danger that this bird virus, or any other new highly contagious virus, could **mutate** into a new virus easily transmissible between humans. This could spark off an **influenza pandemic**, causing widespread illness and deaths across the globe.

THE EU'S ACTION

Preventive measures

- **Surveillance and early detection mechanisms** aim to pick up on the circulation of avian flu viruses in poultry flocks and wild birds at an early stage.
- **Routine surveillance of wild birds**, especially migratory species, is continuously implemented, together with enhanced biosecurity and risk-prevention measures.
- A **new Directive (2005/94/EC)** adopted in December 2005 sets out measures to prevent the spread of avian influenza.
- Other legislative provisions are **continually updated to address new developments** in the disease situation.
- **Preventive vaccination** may be authorised to keep the disease from spreading further. Member States must get approval from the Commission before carrying out preventive vaccination programme. Targeted preventive vaccination of poultry is subject to tight controls and vaccinated birds must be monitored closely.
- Following confirmed outbreaks of avian flu in third countries, the Commission can impose **import bans** on potentially risky poultry products and live birds from affected countries. The restrictions are reviewed and eased as the risk of infection falls.

Control measures

- Any Member State in which there is an outbreak of highly pathogenic avian influenza in poultry or captive birds must put a series of measures in place, in line with the **Avian Influenza Directive** and other EU legislation.
- These measures include the establishment of a **protection and surveillance zone**, and the creation of additional buffer zones in high-risk areas around them.
- All birds on the infected holding must be culled and destroyed (derogation for certain captive birds, such as zoo or ornamental birds). In the surveillance zone, there is a **ban on the movement of live birds** and meat and **strict biosecurity measures**, such as disinfection, must be applied.
- Member States can decide on **emergency vaccination** as a short-term measure when there is an outbreak of highly pathogenic avian influenza within or very close to their territory.

Financial support

For EU Member States

- The EU budget provides significant funds to **support farmers who are hit hardest** by an avian influenza outbreak. EU financial assistance aims to soften the blow of livestock losses, eradication costs or a drop in market prices for farmers.

For third countries

- At an **International Pledging Conference** held in Beijing in **January 2006**, the Commission and EU Member States committed a total of around €211 million towards the fight against avian influenza and preparations for a possible human influenza pandemic. The Commission and the World Bank have established a multi-donor trust fund, called the Avian and Human Influenza Facility (AHIF), through which a large part of the EU-pledged funds will be administered to countries in need of assistance.

Cooperation

Within the EU

- The **Community Reference Laboratory** coordinates the methods employed within the European Union for the diagnosis of avian influenza. Cases of the disease found in the EU are confirmed, along with the strain, at the Veterinary Laboratories Agency in Weybridge, UK.

With international organisations

- The EU is working closely together with the **World Health Organisation**, the **Food and Agriculture Organisation** and the **World Organisation for Animal Health (OIE)**, in response to the global threat of avian flu.
- Through its **Better Training for Safer Food** initiative, the Commission organises EU training on avian influenza for government officials from ASEAN (Association of South-East Asian Nations). The programme aims to train officials in the region in developing effective avian influenza contingency plans.

Research

- For 2006 alone, the EU provided €20 million for **avian and pandemic influenza research**. By combining all Member States' forces, the EU is spearheading research into the disease and into tackling the virus.

Information

- The EU is **keeping citizens well informed** about the avian influenza situation and the potential risks associated with an outbreak. The **European Centre for Disease Prevention and Control (ECDC)** issues regular assessments of the risk of avian flu to human health and advice to the general public on related matters. Specific information has been provided for poultry industry workers and anyone likely to come into contact with birds. Farmers are provided with clear guidelines on how to protect their flocks and how to respond in case of an outbreak.

EU financial support for farmers

- The EU will pay up to 50% of the cost of market support measures in the eggs and poultry sector, mitigating the effects of a drop in demand resulting from avian influenza outbreaks.
- The budget also covers 50% of the costs of compensating for the financial losses that farmers incur as a result of eradication measures. This support includes compensation for the loss of livestock and the costs of cleaning and disinfection.
- The EU can fund up to 100% of the cost of supplying emergency vaccines and 50% of the costs of carrying out emergency vaccination.

EXAMPLES OF CONCRETE ACTIONS

Funding for national surveillance programmes

Surveillance programmes are carried out in wild birds and in poultry on a yearly basis to ensure **early detection of infection**. The EU offers significant financial assistance in support of surveillance, bearing **50% of the cost of laboratory testing**. Samples are taken from wild and domestic birds in each Member State. National authorities submit detailed results of the programme to the Commission, helping the EU to strengthen its surveillance activities with regularly updated risk assessments, particularly with regard to wild birds.

EU-funded research projects

FLUAID, which started in January 2006 and runs until the end of 2008, focuses on the development of tools and vaccines to fight avian flu in poultry. With EU funding worth €1.2 million, it aims to build a European vaccine bank from

which appropriate vaccines can be selected and produced in the event of an outbreak.

The **HEALTHY POULTRY** project has been working on new strategies for the prevention, control and monitoring of avian influenza since 2004. The EU contributes €1.12 million to this project, which will provide guidelines to implement the new strategies in EU Member States by its scheduled end-date of October 2007.

EPIZONE brings together 20 institutions from ten European countries, as well as from China and Turkey. This consortium is supported by €14 million worth of EU funding which runs over the course of five years. Having begun its work in 2006, the network focuses on sharing expertise between more than 250 scientists. It also conducts research on preparedness, prevention, detection and control of infectious diseases like avian flu.

Further information

- DG SANCO pages on Avian Influenza
http://ec.europa.eu/dgs/health_consumer/dyna/influenza/index.cfm
- Overview of EU-funded research into avian and pandemic influenza
<http://ec.europa.eu/research/press/2006/pr0702en.cfm>
- EU Directive on Avian Influenza
<http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:32005L0094:EN:NOT>
- European Centre for Disease Prevention and Control (ECDC)
<http://www.ecdc.eu.int/>
- World Health Organisation Avian influenza pages
http://www.who.int/csr/disease/avian_influenza/en/
- UN Food and Agriculture Organisation pages on Avian Influenza
http://www.fao.org/ag/againfo/subjects/en/health/diseases-cards/special_avian.html
- World Organisation for Animal Health (OIE)
http://www.oie.int/eng/info/en_influenza.htm

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