

# CEI Impact Worksheet

## Highly Pathogenic Avian Influenza H5N1 – Poland

### Summary

Poland recently experienced its first outbreak of highly pathogenic avian influenza (HPAI H5N1) in poultry. The outbreak began on two commercial turkey farms and has since spread to other parts of the country. Poland is a major producer and exporter of poultry and poultry products to Europe and the world market. HPAI disease control measures, along with trade restrictions and reduced consumer demand, will likely cause significant economic impacts within the country. Risk to the United States is low, due to U.S. trade restrictions on poultry imports from Poland and on other countries which import live poultry and poultry products from Poland that have also experienced HPAI H5N1 outbreaks.

### Outbreak background and status

On December 3, Poland reported an outbreak of HPAI H5N1 virus in turkeys. The outbreak began November 30 at two commercial turkey farms near Plock, Mazowieckie Province, about 110 km northwest of Warsaw (see map). More than 4,000 turkeys died or were culled. This was the first report of HPAI H5N1 in domestic poultry in Poland; previous reports occurred in wild swans in 2006.

HPAI has surfaced at several other locations in Poland, including: (1) two large commercial farms of laying hens near Zuromin, where more than 500,000 birds were being raised; (2) three wild birds at an animal shelter near Orneta, 200 km north of Warsaw; and (3) two small flocks of mixed poultry several km from the animal shelter. As of December 17, Poland had confirmed to the OIE HPAI outbreaks at 8 sites: 5 in Mazowieckie Province (Plock, Zuromin) and 3 in Warminsko-Mazurskie Province (Orneta). National sources also reported a possible 9th outbreak at a farm about 10 km southwest of Orneta.

Standard disease control measures have been implemented at all affected sites. State authorities are also monitoring markets where 40,000 eggs were reportedly distributed from the H5N1-infected farms near Zuromin. Approximately 2,500 eggs were sold to consumers and authorities have recommended boiling eggs prior to consumption.

Sources of the HPAI outbreaks in Poland are unknown, although contact with wild birds and infected vehicles and/or feed have been suspected.

*Sources: OIE WAHID database; CIDRAP News; Argus Research Operations Center*



HPAI H5N1 outbreak locations in Poland (green-shaded countries have all reported outbreaks).

### Poland's share of the international market for poultry and poultry production

In 2006, Poland raised 141.8 million chickens, ducks, geese, guinea fowl, and turkeys (Table 1). Poland's poultry stocks were the third largest within the 27-member European Union (E.U.), trailing only France (225.6 million) and the United Kingdom (173.1 million). Poland also produced 1 million tons of poultry meat in 2006, ranking 4th behind the United Kingdom (1.6 million tons), France (1.6 million tons), and Spain (1.1 million tons). Poland's egg production in 2006 (approximately 0.5 million tons) ranked 7th within the E.U. and represented 0.9% of world egg production.

Poland is a major exporter of poultry and poultry products, accounting for 3.7% of world live poultry exports and 2.0% of world poultry meat and egg

exports in 2005 (Table 2). Most of Poland's poultry and poultry product exports go to the E.U. and Eastern Europe. Poland's poultry meat and egg exports during 2005 were valued at nearly \$440 million, the majority from chicken meat. Poland's turkey meat exports in 2005 totaled 44,000 tons, comprising 4.7% and 8%, respectively, of world export quantity and value. Poland also exported approximately 49,000 tons of table eggs in 2005, which comprised 4.2% of world egg exports.

Ukraine is Poland's main customer for live poultry, importing 22.9 million live birds and 54% of the country's live poultry exports in 2006. Most of the rest of Poland's live bird exports went to Belarus (12.2 million), Germany (2.5 million), Russia (1.6 million), and Lithuania (1.1 million). Poland exported 207,743 tons of poultry meat in 2006, with 57% going to three countries: Germany (72.8 tons), the United Kingdom (28.6 tons), and the Czech Republic (16.2 tons). Other major poultry meat importers included Belarus (13.3 tons), the Netherlands (10.9 tons), and France (10.4 tons).

Source: Global Trade Atlas

**Table 1: Animal stocks and production, Poland, 2005 and 2006**

Product	2005	2006	
	Stocks (1,000 head)	Stocks (1,000 head)	% of World Stocks
Chickens	134,424	124,870	0.7%
Ducks	6,299	4,895	0.5%
Geese/guinea fowl	4,418	3,943	1.2%
Turkeys	7,658	8,099	1.7%
<b>Total</b>	<b>152,799</b>	<b>141,807</b>	<b>0.8%</b>
	Production (metric tons)	Production (metric tons)	% of World Production
Chicken meat	980,000	960,000	1.3%
Duck meat	18,200	16,000	0.4%
Geese/guinea fowl meat	9,200	9,200	0.4%
Turkey meat	25,000	25,000	0.4%
Eggs in shell	535,995	537,232	0.9%
<b>Total</b>	<b>1,568,395</b>	<b>1,547,432</b>	<b>1.1%</b>

Source: United Nations FAO

**Table 2: Exports of live poultry and poultry products, Poland, 2005**

Exports	2005		% of World in 2005	
	Quantity (1,000)	Value (1,000 \$)	Quantity	Value
Live (head in 1,000s)				
Chickens	33,771	16,158	3.8%	1.5%
Ducks	373	747*	2.0%	1.5%
Turkeys	1860	3,936	3.2%	2.4%
<b>Total Live Exports</b>	<b>36,004</b>	<b>20,841</b>	<b>3.7%</b>	<b>1.6%</b>
Products (metric tons)				
Chicken meat	101,740	231,829	1.3%	2.2%
Duck meat	1,250	3,066	1.2%	1.3%
Goose and guinea fowl meat	14,890	56,456	3.2%	3.9%
Turkey meat	44,060	94,186	4.7%	8.0%
Chicken offal	1,450	3,596	0.7%	2.7%
Duck offal	90	242	1.3%	0.2%
Geese offal	190	494	5.6%	0.7%
Turkey offal	310	413	1.1%	1.5%
Eggs without shell, dried	200	798	0.4%	0.4%
Eggs without shell, liquid	2,680	3,224	1.4%	1.1%
Eggs with shell	49,380	45,597	4.2%	3.3%
<b>Total Products Exports</b>	<b>216,240</b>	<b>439,901</b>	<b>2.0%</b>	<b>3.0%</b>

Source: United Nations FAO; \* live duck export values based on data from Global Trade Atlas

## U.S. imports of relevant animal species and related products from Poland

During 2006 and January through October 2007, the United States imported 20,006 kg and 9,057 kg of prepared or preserved animal livers, possibly of poultry origin, from Poland.

Source: *World Trade Atlas*

## Canada and Mexico's imports of relevant animal species and related products from Poland

During 2006 and January through October 2007, Canada imported 29,061 kg and 6,418 kg of prepared poultry meat from Poland. Mexico did not import any HPAI-risk products from Poland in 2006 and 2007.

Source: *World Trade Atlas*

## Potential risk items confiscated from airline passengers arriving in the United States from Poland

During fiscal year 2006, the APHIS:PPQ agricultural quarantine inspection program sampled 525 airline passengers arriving from Poland for items of agricultural interest. Sixteen passengers were found carrying 14 kg of unspecified meat and meat sandwiches. One passenger reported traveling from a farm in Poland, but did not plan to visit a farm while in the United States.

Source: *USDA:APHIS:PPQ Agricultural Quarantine Inspection databases*

## CEI assessment

Poland is a significant producer and exporter of poultry and poultry products in the world market. At least two of the regions experiencing outbreaks (Plock and Zuromin) are major poultry-producing regions in Poland; therefore, the poultry industry will likely experience significant negative economic impacts from these outbreaks due to the effects of disease control measures, trade restrictions, and decreased local consumer demand.

The United States has placed trade restrictions on poultry and poultry products from the affected regions of Poland. The only poultry-related products imported into the United States from Poland during January through October 2007 were processed products which present negligible risk for transmission of HPAI H5N1. Canada is the

major supplier of live poultry and unprocessed poultry meat imports into the United States, accounting for 99% of U.S. imports of these products. Canada's only imports of poultry related products from Poland during January to October 2007 were processed products representing negligible risk. Several countries that do import large quantities of live poultry or poultry meat from Poland (such as France, Germany, Russia, the Ukraine, and the United Kingdom) previously experienced their own HPAI H5N1 outbreaks; therefore U.S. trade restrictions on poultry and poultry products are already in place for these countries or for specified regions in these countries. Consequently, the risk to the United States from the current HPAI outbreak in Poland is considered low.

## CEI's plans for follow-up

CEI will monitor the HPAI situation in Poland but has no immediate plans to issue additional reports. Contact information is provided below.

---

For more information or to provide comments, please contact:

USDA:APHIS:VS:CEAH:CEI  
NRRRC Building B, M.S. 2E5  
2150 Centre Avenue  
Fort Collins, CO 80526-8117  
970.494.7000  
E-mail: [cei/aphis/usda@aphis.usda.gov](mailto:cei/aphis/usda@aphis.usda.gov)

Or visit CEI on the Web at

<http://www.aphis.usda.gov/vs/ceah/cei/>

---

The U.S. Department of Agriculture (USDA) prohibits discrimination in all its programs and activities on the basis of race, color, national origin, age, disability, and where applicable, sex, marital status, familial status, parental status, religion, sexual orientation, genetic information, political beliefs, reprisal, or because all or part of an individual's income is derived from any public assistance program. (Not all prohibited bases apply to all programs.) Persons with disabilities who require alternative means for communication of program information (Braille, large print, audiotape, etc.) should contact USDA's TARGET Center at (202) 720-2600 (voice and TDD). To file a complaint of discrimination, write to USDA, Director, Office of Civil Rights, 1400 Independence Avenue, S.W., Washington, D.C. 20250-9410, or call (800) 795-3272 (voice) or (202) 720-6382 (TDD). USDA is an equal opportunity provider and employer.