Veterinary Services
Centers for Epidemiology and Animal Health



July 2006

CEI Impact Worksheet Newcastle Disease in Brazil July 2006

Summary:

Newcastle disease has been reported in a flock of backyard chickens in Vale de Real municipality, Rio Grande do Sul State, Brazil (see map). The National Agricultural Laboratory at São Paulo identified the agent as avian paramyxovirus type 1 (APMV-1). The last outbreak of virulent Newcastle disease in Brazil was reported in April 2001.

In May 2005, Brazil reported 6,000 chicken deaths in Jaraguari, in the state of Mato Grosso do Sul (see map). Initial government reports stated that the chickens suffered from an unidentified respiratory illness. Newcastle disease virus (non-pathogenic) was isolated a week later, but subsequent official reports stated that it was a vaccine strain.

In 2004 and 2005, Brazil reported over 1 billion in poultry stocks. Brazil also produced 10.5 million metric tons of poultry products in 2004 and 2005. Brazil exported nearly 6 million live poultry in 2003 and 2004, most of which were chickens. Argentina, Spain, France, and Chile were the largest importers of live poultry from Brazil in 2005. Japan, Russia, Netherlands, and China were the largest importers of poultry products from Brazil in 2005.

The US imported 9,000 live chickens as well as 10,071 live birds from Brazil in 2005. From January to April 2006 the US has imported 2,000 live birds from Brazil. The US did not import any poultry products or feathers from Brazil between January 2005 and April 2006.

Canada imported over 17 million KG of poultry product from Brazil in 2005 and 7 million KG from January to April 2006. Canada did not import any live birds, live poultry, or feathers from Brazil in 2005 or thus far in 2006. Mexico did not import any birds, poultry, poultry products, or feathers from Brazil between January 2005 and March 2006.



How extensive is Newcastle Disease in Brazil, and what was Brazil's disease status prior to the outbreak?

Previous to this outbreak, Newcastle disease was last reported to the OIE in Brazil in April 2001. On July 5, 2006, the Department of Animal Protection, Ministry of Agriculture, Livestock and Food Supply (Brasilia, Brazil) reported to OIE an occurrence of Newcastle disease in Brazil. The outbreak started on May 2, 2006 in a backyard (noncommercial) chicken flock of 44 birds, 16 of which died. The remaining birds were culled. The National Agricultural Laboratory at São Paulo identified the agent as avian paramyxovirus type 1 (APMV-1). The affected farm is located in Vale de Real municipality. Rio Grande do Sul State. Disease control measures being undertaken include stamping out, premises quarantine and disinfection, screening, zoning (3-km-radius protection zone and 10-km-radius surveillance zone around the outbreak), and movement control inside the country. Nearby farms have been under surveillance and no additional outbreaks have been detected.

In May 2005, Brazil reported 6,000 chicken deaths in Jaraguari, in the state of Mato Grosso do Sul (see map). Initial government reports stated that the chickens suffered from an unidentified respiratory illness. Newcastle disease virus was isolated a week later, but subsequent reports stated that it was a vaccine strain.

Source: OIE Disease Information Report, ProMED

What is Brazil's place in the international market for relevant animal species and related products?

In 2004 and 2005, Brazil reported having over 1 billion in poultry stocks. Brazil also produced 10.5 million metric tons of poultry products in 2004 and 2005 (Table 1).

Brazil exported nearly 6 million live poultry in 2003 and 2004, most of which were chickens. Argentina, Spain, France, and Chile were the largest importers of live poultry from Brazil in 2005. Chicken meat also accounted for the majority of Brazil's exports of poultry products in 2003 and 2004. Japan, Russia, Netherlands, and China were the largest importers of poultry products from Brazil in 2005 (Table 2).

Source: United Nations FAO

Table 1: Animal stocks and production in Brazil, 2004 and 2005

	2004	2005		
	Stocks (1000s)	Stocks (1000s)	% of World Stocks	
Chickens	1,100,000	1,100,000	<0.1%	
Ducks	3,550	3,550	<0.1%	
Turkeys	16,200	16,200	<0.1%	
Total	1,119,750	1,119,750		
	Production (Metric tons)	Production (Metric tons)	% of World Production	
Chicken Meat	8,668,000	8,668,000	12.4%	
Duck Meat	7,410	7,410	0.2%	
Eggs, excluding Hen	59,500	59,500	1.2%	
Hen Eggs	1,560,000	1,560,000	2.6%	
Turkey Meat	220,000	220,000	4.2%	
Total	10,514,910	10,514,910		

Source: United Nations FAO

Table 2: Exports of relevant live animals and animal products from Brazil, 2003 and 2004

	2003		2004		% of World in 2004	
Exports	Quantity	Value (1000 \$)	Quantity	Value (1000 \$)	Quantity	Value
			Live (1000s)			
Chickens	5,947	8,035	5,931	8,929	0.7%	0.9%
Turkeys	0	0	10	68	<0.1%	<0.1%
Totals Live	5,947	8,035	5,941	8,997		
	•	Prod	ducts (metric tons)		·	
Chicken Meat	1,922,042	1,709,743	2,424,520	2,493,930	33.2%	29.2%
Duck Meat	37	58	430	918	<0.1%	<0.1%
Turkey Meat	110,447	152,316	134,339	212,432	14.7%	12.7%
Eggs, Excluding Hens	797	567	2,897	2,295	13.1%	2.9%
Eggs, Dry Whole Yolks Hen	823	3,180	997	4,508	2.6%	2.9%
Eggs, Liquid Hen	2,169	3,657	3,433	5,910	1.8%	1.8%
Hen Eggs	1,389	3,616	3,364	6,720	0.3%	0.5%
Meat Canned Chicken	39,186	91,376	47,547	105,577	5.1%	3.4%
Offal Livers Geese	88	18	405	248	10.9%	0.4%
Total Products	2,076,978	1,964,531	2,617,932	2,832,538		

Source: United Nations FAO

What are US imports of relevant animal species and related products from Brazil?

The US imported 9,000 live chickens as well as 10,071 live birds from Brazil in 2005. From January to April 2006 the US has imported 2,000 live birds from Brazil. The US did not import any poultry

products, or feathers from Brazil between January 2005 and April 2006 (Table 3).

The US does not consider Brazil to be free of Newcastle disease; therefore exports of live poultry and poultry products to the US are restricted. All live poultry and other bird species imported into the US (except from Canada) are required to have a USDA issued import permit, a health certificate issued by a government veterinarian in the country of origin, and be guarantined for 30 days in a USDA animal import quarantine facility. Testing for communicable diseases of poultry is completed during the quarantine. This includes pet birds as well as commercial birds.

Source: World Trade Atlas

Table 3: US imports of relevant animals and animal products from Brazil, 2005 and January - April 2006

Product	2005	January - April 2006	
	Quantity (number)	Quantity (number)	
Live Chickens	9,000	0	
Live Birds, Breeding	10,071	2,000	
Total Live Birds	19,071	2,000	

Source: World Trade Atlas

What are Canada's and Mexico's imports of relevant animal species and related products from Brazil?

Canada imported over 17 million KG of poultry product from Brazil in 2005, worth over 40 million Canadian dollars. From January to April 2006 Canada has imported 7 million KG worth 14.5 million Canadian dollars. Canada did not import any live birds, live poultry, or feathers from Brazil in 2005 or so far in 2006 (Table 4).

Mexico did not import any birds, poultry, poultry products, or feathers from Brazil between January 2005 and March 2006.

Source: World Trade Atlas

Table 4: Canadian imports of relevant animals and animal products from Brazil, 2005 and January though April 2006

Product		2005	January - April 2006	
	Quantity (KG)	Value (Canadian \$, mil)	Quantity (KG)	Value (Canadian \$, mil)
Poultry Meat and Offal	16,867,010	37.5	6,853,854	14.1
Prepared or Preserved Chicken Meat	630,328	2.8	113,361	0.5
Total Poultry Product	17,497,338	40.3	6,967,215	14.6

Source: World Trade Atlas

What is the level of passenger traffic arriving in the United States from Brazil?

In 2005, 1,057,766 air passengers arrived from Brazil on direct flights to the US. This number includes passengers arriving from Brazil who are not necessarily residents of Brazil.

As part of the APHIS-PPQ agricultural quarantine inspection monitoring, 2,206 air passengers from Brazil were sampled for items of agricultural

interest in fiscal year 2005. One passenger was found to be carrying an item of interest, processed chicken (1kg). Four passengers stated that they had come from a farm. No passengers stated that they were going to visit a farm in the US.

Source: USDA APHIS-PPQ Agricultural Quarantine Inspection databases, Bureau of Transportation Statistics.

CEI's plans for follow up:

No follow-up is currently planned regarding the outbreak of Newcastle disease in Brazil. If you need more information or would like to comment on this worksheet, you may reply to this message or contact Kamina Johnson at (970) 494-7340.

For more information, contact:

USDA:APHIS:VS:CEAH:CEI NRRC Building B, M.S. 2E5 2150 Centre Avenue Fort Collins, CO 80526-8117 970.494.7000

E-mail: Kamina.k.johnson@aphis.usda.gov

Or visit CEI on the Web at http://www.aphis.usda.gov/vs/ceah/cei/

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