



Poultry Voice

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Avian influenza outbreak in Texas and the Northeast

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Delaware and Maryland

The first commercial live-bird flock with Avian influenza was discovered Feb. 6. Clinical signs included depression, respiratory symptoms, and low mortality. The flock was depopulated on Feb. 7. Birds were composted on site, and a quarantine was placed on farms within a 2-mile radius and intensive surveillance was instituted within a 6-mile radius. The virus was determined to be an H7N2 low-pathogenic virus. A second flock of roaster-type chickens belonging to a producer raising chickens for a commercial integrator was discovered to have the virus. All 73,000 birds were depopulated and also composted on site. This virus was also an H7N2 virus.

The states of Delaware, Maryland, and Virginia as well as the Delmarva Poultry Industry issued biosecurity alerts and cancelled industry meetings in an effort to contain the virus. In addition to the quarantines and biosecurity measures, beginning Feb. 23 all birds bound for processing were tested for the virus. By the end of the first week in March, approximately 2,241 houses on 943 farms on the Peninsula had been tested. All were negative. However, on Saturday March 6, samples from a farm in Pocomoke, Md., were confirmed to be positive for the same virus. The farm had experienced an increase in mortality. The 6-week-old birds (118,000) were depopulated over the weekend and composted inhouse. Another farm with 210,000 2-week-old birds only a mile from the infected farm belonging to the same farmer was also depopulated and composted as a precaution. A third farm 2 miles away belonging to the same farmer was placed under observation and monitoring. Two separately owned farms about 15 to 20 miles away that have connections to the infected farm have been placed under quarantine. Farms within 2 miles of the infected and connected farms have been

placed under quarantine. Pre-processing testing of flocks on Delmarva continues. Some restrictions on transport of poultry and poultry litter remain in effect. Currently, apart from the three cases identified, all farms tested on Delmarva have been negative for AI.

New Jersey

Four live bird markets tested positive for the avian influenza virus, but no commercial flocks have been reported infected. The virus is a low-pathogenic, mild form of the H7N2 subtype. New Jersey has not reported any new cases of avian influenza to date.

Pennsylvania

Routine surveillance detected the H2N2 avian influenza virus in a flock in Lancaster County. There were no clinical signs, increase in mortality, or decrease in egg production. The farm is under quarantine while additional samples are being tested, and 16 other flocks in a surveillance zone were tested for the virus. As a precaution, all poultry exhibitions have been cancelled till further notice. Pennsylvania has not reported any new cases of avian influenza to date.

Texas

A flock of about 7,000 broilers in Gonzales County, about 50 miles east of San Antonio, Texas, was confirmed to be positive for a highly pathogenic strain of H5N2 avian influenza virus on Feb. 17. Initially, the clinical signs led authorities to believe it was of low pathogenicity, but sequencing at the National Veterinary Services Laboratory (NVSL) in Ames, Iowa, determined that the virus meets the OIE definition of highly pathogenic. Pathogenicity tests in chickens indicated that it is of low pathogenicity, but it is still being labeled an HPAI. The flock was depopulated on Feb. 21, and the farm was placed under quarantine.

In an effort to determine the source of the investigation, an epidemiological investigation is under way, and surveillance testing was begun within a 10-mile radius of the



farm. About 164 commercial and noncommercial farms have been tested, and all have been found negative. In conjunction with USDA, the Texas Animal Health Commission (TAHC) also began testing within three zones over 90 days to ensure containment of the infection. These were the affected (5 miles/8 km radius), the surveillance (10 miles/16 km radius), and the buffer (31 miles/50 km radius) zones around the index farm. This was done by collection of cloacal and tracheal swabs once a week within the 5-mile and once every two weeks within the 10-mile zones.

Two live bird markets in Houston, which received birds from the infected flock, were found to be positive for the virus and were depopulated on Feb. 23. The markets were cleaned and disinfected. As a precaution three other markets in Houston were depopulated, cleaned, and disinfected. This is the first incidence of HPAI in the United States since 1983. The infected farm does not produce birds for export; it produces birds only for live bird markets.

Trade embargoes

Currently, over 47 countries including the European Union (EU) have banned poultry imports from affected

states or the entire United States. Until the outbreak in Texas, the EU had not instituted an import ban, but it currently bans all poultry imports from the United States. Prior to the case in Texas, Mexico banned poultry products only from Delaware, but it is now banning live birds, eggs, and poultry products (except heat-treated products) from the whole country. Some of the countries have banned poultry imports only from the affected states, but Azerbaijan, Brazil, Chile, China, Colombia, Cuba, the EU, India, Indonesia, Japan, Malaysia, Mexico, Peru, Poland, Qatar, Singapore, South Africa, South Korea, Sri Lanka, and Thailand have banned poultry imports from the entire country. Russia initially banned poultry products from Delaware, but now bans products from Texas. Russia indicates that if the situation does not improve, it will extend the ban to include the whole country. Guatemala has not issued a trade ban but has asked its importers not to purchase poultry products from states in the Northeastern United States. Some countries are allowing importation of heat-treated poultry products and specific pathogen-free eggs (SPF), while countries like Indonesia and Qatar will not even import heat-treated products. Mexico's ban includes SPF eggs (www.dpichicken.org, <http://denver.state.de.us/dda>, www.aphis.usda.gov).

International News

AI in Southeast Asia

The H5N1 strain of AI that has infected 10 Asian countries is currently blamed for a total of 22 deaths in Thailand and Vietnam. These two countries are the hardest hit by the outbreak and the only places where the virus has jumped to humans. About 80 million chickens and other birds in the countries have been slaughtered in an effort to control the disease. The United Nations has expressed concern that the disease has damaged the region's livestock industry and might have serious consequences on attempts to alleviate poverty. The World Bank indicated that the culling of Vietnam's poultry could lead to huge economic losses. The UN said it would need regional and international collaboration to control the outbreak. Twenty countries met at the end of February in Bangkok to discuss the economic impact and methods of rebuilding the industries (www.meatingplace.com).

Moscow mulls increasing U.S. poultry imports

The *Moscow Times* in December 2003, citing sources in Russia's Commission for Protective Measures in Foreign Trade, reported that a resolution on the 2004

meat quotas would increase the share allocated to the United States. The recommendation would grant this country a poultry meat quota of 771,900 tons this year out of a total 1.05 million. The rest would be shared between the EU and other European countries. Last year, the United States was allowed to export 553,500 tons of poultry meat out of a total of 744,000 set for May to December (www.meatingplace.com).

AI in Canada

On Feb. 19, a farm in the Fraser Valley of British Columbia, Canada was determined to be positive for the low-pathogenic H7N3 strain of avian influenza. Some 2,000 birds died over four days. The farm was placed under quarantine, the farm workers were isolated, and the 16,000 birds were humanely destroyed and disposed of. An active surveillance was then put into place to identify any other farms that had been in contact with the infected farm. Five of the farm employees got sick – two each with flu-like symptoms and colds and the fifth with conjunctivitis--but the AI virus was not isolated from any of the sick workers (Wendy Cox, Canadian Press, 2/24/04).





Federal News

FDA issues new rule on poultry feed ban

In an effort to prevent further cases of bovine spongiform encephalopathy (BSE) in ruminant animals, the Food and Drug Administration (FDA) has prohibited the feeding of poultry litter to cattle. This rule, unlike others, became effective as soon as it was published in the Federal Register. Contaminated feed is widely believed to be the cause of the BSE epidemic in Britain during the 1980s, and the ruling by the FDA was praised by Secretary Tommy Thompson of the Health and Human Services Department as well as Senator Tom Harkin of Iowa. AMI President Patrick Boyle was pleased with the regulations, noting that the new rule exceeds those called for under the Office of International Epizootics guidelines (www.meatingplace.com).

EPA finalizes new rule for effluent discharge

A new rule prescribing additional wastewater treatment requirements at meat and poultry slaughtering and processing facilities was finalized in the last week of February by the Environmental Protection Agency (EPA). The rule establishes new numerical limitations, technology requirements, and management practices for direct discharging processing plants.

The EPA estimates compliance will cost \$58 million a year and lead to reductions in the discharge of total nitrogen of about 27 million pounds per year and reductions of conventional pollutants of about 4 million pounds per year.

The rule applies to direct discharges of wastewater from existing and new:

- Meat first processors that slaughter more than 50 million pounds per year
- Meat further processors that generate more than 50 million pounds per year of the finished products
- Independent renderers of meat and poultry products that use more than 10 million pounds per year of raw material
- Poultry first processors that slaughter more than 100 million pounds per year
- Poultry further processors that generate more than 7 million pounds per year of finished products.

The rule also applies to direct discharges of wastewater from new poultry products at lower thresholds, including poultry first processors slaughtering no more than 100 million pounds per year and poultry further processors generating 7 million pounds or less per year of finished product.

The final rule is expected to be published in the Federal Register in upcoming weeks (www.meatingplace.com Daily News 3/2/04).

FDA approves use of Cecure for raw poultry

The FDA has approved the use of cetylpyridinium chloride, marketed under the trade name Cecure, as a spray for pathogenic organisms on raw poultry. Cecure will be used as a pre-chill spray for poultry carcasses on line. President and CEO of Safe Foods Corp., of Arkansas, Curtis Coleman indicates that the FDA will publish the new regulations in its Federal Register, allowing for a 30-day comment period, after which the product will be available commercially. Cecure has been determined to be effective against pathogens such as *Salmonella*, *E. coli 0157:H7*, *Listeria*, and *Campylobacter* (www.meatingplace.com 3/4/04).

FDA one step closer to poultry antibiotics ban

A full-blown ban on antibiotic use in poultry moved a step closer to reality Tuesday, as an administrative law judge upheld the Food and Drug Administration's conclusion that Baytril's use in chicken can help spur drug-resistant bacteria that could infect humans.

At issue the class of antibiotics called fluoroquinolones, which include the popular drug Cipro. The FDA has concluded that use of fluoroquinolones in chicken is a significant cause of antibiotic-resistant strains of *Campylobacter*.

Drug manufacturers and many processors argue that this class of drugs is vital to the fight against respiratory diseases in chickens.

In 2000, FDA proposed banning the two fluoroquinolones used in poultry. Abbott Laboratories agreed to pull its version, Sara Flox, off the market immediately. But Bayer Corp. fought the decision, and its Baytril has continued to sell during the company's appeal.

Tuesday, FDA Administrative Law Judge Daniel J. Davidson ruled against Bayer, citing "serious questions about the safety of Baytril use in poultry" in deciding the FDA's ban should take place, according to an *Associated Press* report.

Bayer has 60 days to make a final appeal directly to the FDA's commissioner. If the commissioner does not intervene, the ban could take effect by late May (Bill McDowell, 3/18/04, www.meatingplace.com).





Topics Discussed at the 2004 IPE, Atlanta, Ga.

Global impact of AI in Asia

Educational programs at the International Poultry Exposition in Atlanta, Ga. began with a presentation by Gordon Butland of Rabobank International. He indicated that three critical issues facing the global poultry industry are animal welfare, environmental issues, and food safety. Butland said that with a retail value of about \$200 billion, it was imperative that the world poultry industry focus on helping processors deal with these issues while achieving maximum cost benefits. He said that the AI outbreak in the Far East needs to be dealt with on a global basis. He pointed out that certain things need to be done to alleviate the consequences of the outbreak, including the increase in birds needed to cover consumer demand. Butland pointed out that there would be a need to supply countries dependant on the Asian poultry markets, and that countries like China, Mexico and Brazil are already poised to do so - Brazil having increased its output of poultry from 4.9% to 10.4% of the global trade. Describing the habit of consumers to snack (about 70% of daily food consumption), he asked the industry to consider providing consumers with more snacking options and value-added foods (www.meatingplace.com).

Biosecurity for the poultry industry

Dr. Charles Beard of the U.S. Poultry & Egg Association voiced his concern about a lack of biosecurity in the U.S. poultry industry. He mentioned that biosecurity is not an option but a necessity, due to such factors as diseases like the exotic Newcastle disease outbreak in California in 2002-2003, AI in southeast Asia and in domestic live markets, and the potential for other diseases and bioterrorism. Beard indicated that biosecurity programs should be proactively based on philosophies, facilities, and operations to keep diseases at bay. He mentioned that producers who indicate that they have biosecurity programs but do not have secured or locked facilities and allow people with street clothes to enter their facilities, do not have biosecurity programs. Biosecurity will work if the integrators take the lead and a regional approach, so that if an index case cannot be prevented, it may still be contained in order to control the spread of disease and minimize damages.

Poultry production and air quality

Dr. Brian Fairchild of the University of Georgia, and Dr. Mack Gray of the U.S. Department of Agriculture discussed the issue of ammonia control in poultry houses and its effect on air quality. The increase in rural living has brought consumers closer to animal agriculture, with resulting increases in complaints about water, air, and environmental quality issues. They both indicated that ammonia in poultry houses should be controlled for good-quality birds as well as the health of farm workers, but also because poultry and animal industries are liable to regulation under the Air Quality Act. Mack indicated that regulation is on its way. Fairchild cited some methods of detecting ammonia in poultry houses (test papers, gas detection tubes, passive dosi tubes, and ammonia meters) to indicate how well the houses are maintained. He said that in order to manage ammonia in houses, producers should maintain adequate air flow, have proper ventilation, monitor humidity, use litter treatments, and properly maintain water and feed lines. Fairchild indicated that future control of poultry house emissions will depend on control of ammonia production in the houses (www.meatingplace.com).

Poultry industry needs to communicate with consumers

Mike Robach of Cargill, Inc., gave a presentation on the importance of engaging consumers in a positive manner. He indicated that consumers today are subject to influences and pressures from the media and activists and sometimes need to better understand how the industry works. He said that industry practices concerning bird care and handling, environmental management, and the use of antibiotics are some of the things consumers do not have a good handle on. He advised that it was wise to explain, for example, why antibiotics are used – to prevent disease and to treat birds when they are infected – and therefore ultimately promote growth. Robach said that the industry has not done a good job of communicating important information to consumers. He said the industry should use scientific data and not perception to drive programs, policies, and processes (www.meatingplace.com).





West Virginia News

West Virginia CAFO NPDES Permit

In the past, regulation of agricultural operations has largely been left up to the U.S. Department of Agriculture (USDA) and State counterparts, but the significant amount of water pollution from concentrated animal production, feed, and processing facilities caused U.S. Environmental Protection Agency (EPA) to regulate animal production and processing facilities with uniform national standards through the National Pollution Discharge Elimination System (NPDES) permit program.

The Concentrated Animal Feeding Operations (CAFO) NPDES effluent limitations (40 CFR 412) affects large livestock operations defined in the rule as those raising more than 1,000 cattle, or 700 dairy cows, or 2,500 swine, or 10,000 sheep, or 125,000 chickens, or 82,000 laying hens, or 55,000 turkeys. Approximately 500 million tons of manure are generated annually by an estimated 238,000 livestock operations. The CAFO is to be implemented via State NPDES programs in 2004 with the involvement of EPA, the USDA and State Departments of Agriculture.

Under the new rule, all CAFOs are required to apply for a permit, submit an annual report, and develop and follow a plan for handling manure and wastewater. In addition, the rule places controls on land application of manure and wastewater, covers all major animal agriculture sectors, and increases public access to information through CAFO annual reports. Because of the new rule, EPA expects that up to 11,000 additional facilities will be required to apply for permits.

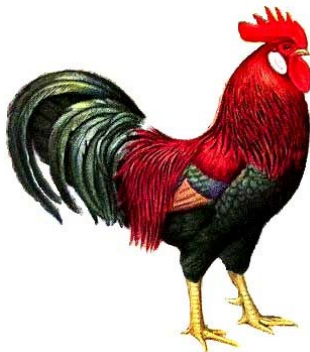
West Virginia's program to meet the federally mandated regulation of CAFO is slated for inception Spring 2004, via a General NPDES Permit, which for the first time in West Virginia will bring large animal feeding operations under the purview of the State NPDES program. The proposed WV CAFO General NPDES Permit does not allow for discharge of waste/wastewater from the CAFO under normal operating conditions. Discharges prohibited by the permit include, but are not limited to, the following:

- Contaminated runoff from feedlots, corrals, stockpiled manure, and silage piles,
- Discharges associated from improper land application of manure and/or wastewater activities under the control of the CAFO operator,
- Discharges of manure and/or wastewater due to pipe breakage or equipment failure, and
- Leaks and seepage from retention ponds, manure storage facilities, or lagoons to ground water that has a direct hydrological connection to surface waters, including seepage that results from the improper land application of manure and/or wastewater.

Facilities must have holding areas or otherwise be designed, constructed, operated, and maintained to contain all process generated wastewater and all runoff from a 25 year, 24 hour rainfall event for the location of the CAFO. Should a catastrophic or chronic rain event (over 4 inches in 24 hours) occur, overflow discharges are authorized, only if there is a properly designed, constructed, operated, and maintained process wastewater/manure holding structure.

The WV General CAFO NPDES permit also imposes best management practices (BMPs), including the development of a nutrient management plan; limits on the land application of manure, litter, and other process wastewaters at a rate and in a manner consistent with appropriate agricultural utilization of nutrients; setbacks and vegetated buffers.

The WV Division of Water and Waste Management is expected to soon announce a series of public meetings to consider comments on the draft WV General CAFO NPDES Permit. All sectors of the agricultural industry in West Virginia need to be prepared to provide meaningful and effective comments on the draft WV General CAFO NPDES permit at these meetings, since the final implementation will affect the manner in which livestock operations are ran and regulated. (Barbara D. Little, Esq., Jackson Kelly, PLLC)



The West Virginia Poultry Association is inviting people to join for 2004. Dues are \$20 annually. Anyone interested in becoming a member of the Association should contact the WVPA office at P.O. Box 612, Moorefield, WV 26836; Telephone, 304-538-2725 or 538-6688



Upcoming Meetings

April

- 6, Spring Meeting of the West Virginia Poultry Association, Millcreek Ruritan Building, Oldfields, WV, 10 a.m., (14.7 miles north of Moorefield on Rt. 220. The building is on the right.) Lunch will be served. Contact the WVPA at 304-538-2725 or 538-6688.
- 20-21, FSIS Verification of HACCP Plans, Washington, D.C., Contact: Food Processors Institute, 800-355-0983; fpi@nfpa-food.org; www.fpi-food.org
- 22-23, Prerequisites to HACCP Workshop, Washington, D.C., Contact: Food Processors Institute, 800-355-0983; fpi@nfpa-food.org; www.fpi-food.org

May

- 3-6, HACCP for Meat and Poultry, Athens, Ga. Contact: Marian Wendinger, University of Georgia, 706-542-2574; marianw@uga.edu; www.efsonline.uga.edu
- 11-12, North Atlantic Poultry Health and Management Conference_Holiday Inn, Harrisburg/Hershey, Grantville, Pa. Contact: Mike Hulet (814) 863-8934, mrh4@psu.edu
- 17-20, National Egg Quality School, Hilton, Atlanta, Atlanta, GA. Contact Candy Byers, (765) 494-8510, cbyers@purdue.edu
- 23-27, American Society for Microbiology 104th General Meeting, New Orleans, La. Contact: ASM, 202-737-3600; www.asm.org

Poultry Voice is published quarterly to provide those interested in the poultry industry with pertinent production information from industry, academia, and federal and state governments to help ensure economic production of poultry in a manner that sustains the environment. *Poultry Voice* is sponsored by the West Virginia Extension Service.

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