

Poultry HEALTH REPORT

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Summer 2005

Managing Avian Influenza Risk

International Association for Food Protection hosts timely symposium

The continuing story of the highly pathogenic avian influenza (HPAI) H5N1 virus that's traversing Southeast Asia and beyond inspired a late breaking symposium on Aug. 15 at the annual meeting of the International Association for Food Protection in Baltimore, Md.

The perplexing H5N1 virus generates an extensive list of risk assessment questions, according to symposium presenter Dr. Will Hueston, director of the Center for

Animal Health and Food Safety at the University of Minnesota.

For starters, stakeholders are wondering if H5N1 will spread.

"The answer is 'yes'," Hueston says, "although the extent of the spread is hard to estimate at this point. And complicating that uncertainty is the fact that other avian AI strains can be expected to emerge."

Given the human cases of illness caused by H5N1 and the human deaths to date, there's also the inevitable question about the potential of H5N1 to cause a pandemic.

"The cytokine storm in the human cases is worrisome," Hueston says. "If it becomes easy for H5N1 to be transmitted from human to human, a pandemic can be expected."

Next, there's the logical question about food contamination.

"Thus far, H5N1 is not considered a foodborne threat, particularly if poultry products are handled and cooked properly," Hueston says. "However, it's prudent to embrace a 'never say never' mindset relative to foodborne transmission." There have been a few documented cases in Southeast Asia of human illness caused by handling of raw or undercooked poultry products contaminated with the H5N1 virus.

Will H5N1 stimulate trade bans? "Yes, some countries will ban trade because of this virus," Hueston predicts. "In order to minimize economic hardships, stakeholders must encourage risk-based restrictions specific to all poultry products including eggs, poultry meat and live poultry."

Compounding the basic trade ban risk is the question about a profound disruption of the global food system. "Without a doubt, global supply chains are vulnerable," Hueston points out, "as raw ingredients

and products move throughout the world in a food system that involves a large workforce."

And then the bottom line: What will be the economic impact of H5N1? Given all the risks, the cost could potentially be high for the entire poultry food chain, Hueston says. "Ultimately, the economic impact of H5N1 depends on the preparedness and response of all stakeholders," he advises.

Clearly, there are several reasons to be concerned about H5N1, Hueston says. "The H5N1 AI has showcased the lack of communication across animal health and public health communities locally, regionally and globally," he emphasizes. "Since an AI with significant impacts on human and



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USDA Moves Toward Privatizing NAIS Database

Agriculture Secretary Mike Johanns has announced the Department of Agriculture's guiding principles for development of a public/private partnership that enables the private sector to maintain animal movement data as part of the National Animal Identification System (NAIS).

"We are gratified by the growing support for an animal identification system, with over 100,000 premises now registered," Secretary Johanns said. "We are eager to work closely

with industry as they develop and maintain databases that contain animal movement information. After hearing the confidentiality concerns of producers, we envision a system that allows these databases to feed a single, privately held animal-tracking repository that we can access."


USDA's four guiding principles for the NAIS are as follows:

- The system must be able to allow tracking of animals from point of origin to processing within 48 hours without unnecessary burden to producers and other stakeholders.
- The system's architecture must be developed without unduly increasing the size and role of government.
- The system must be flexible enough to utilize existing technologies and incorporate new identification technologies as they are developed.
- Animal movement data should be maintained in a private system that can be readily accessed when necessary by state and federal animal health authorities.

USDA solicited public input on NAIS through a variety of means including the formation of a special subcommittee under the Secretary's Advisory Committee on Foreign Animal and Poultry Diseases, a series of listening sessions across the country in 2004, and a thinking paper published for public comment in May 2005. Public response indicates there is widespread support for a system to rapidly trace potentially exposed animals in the event of an animal disease outbreak. A majority of producers who responded also favored a system that allows the animal movement data to be privately held.

USDA officials will be scheduling a stakeholder meeting this fall to clarify expectations for the private tracking system and discuss user requirements and system specifications.

How funding and confidentiality will ultimately be addressed is yet to be said, as industry is now charged to find these solutions. ●



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Study: NAIS Would Improve Consumer Confidence

A recent poll shows that consumers will become even more confident in the safety and security of the nation's meat and poultry supply if a mandatory National Animal Identification System (NAIS) is implemented. Under the NAIS, authorities would be able to quickly locate specific animals to prevent the spread of livestock diseases, such as mad cow disease. The consumer survey was sponsored by Global Animal Management Inc. (GAM), a wholly owned subsidiary of Schering-

Plough Animal Health Corp.

According to the survey of 1,000 U.S. consumers, if NAIS were to be implemented, average consumer confidence in meat safety and security would jump to from 6.5 to 7.4 on a 10-point scale. Nearly 55 percent of those polled said their confidence would then be high (8-10), and those who said their confidence will remain low (1-3) declined from 10 percent to less than 4 percent. ●

USDA Breaks Ground for New Poultry Facility

A groundbreaking ceremony was held recently for a new \$5.2 million facility for state-of-the-art research on chickens and poultry at the U.S. Department of Agriculture's Henry A. Wallace Agricultural Research Center in Beltsville, Md. (BARC).

"This facility will provide much-needed space and allow our scientists to conduct research on poultry nutrition, growth regulation and reproduction," said Edward B. Knipling, administrator of USDA's Agricultural Research Service.

The 28,100-square-foot building is designed primarily to house chickens and turkeys for poultry research conducted by BARC's

Growth Biology Laboratory and Biotechnology and Germplasm Laboratory. The two labs currently share space in a building constructed in the 1930s. Poultry are now housed in other buildings on the grounds.

Scheduled to open in May 2006, the new facility will have a "U"-shaped configuration. One wing will house turkeys, while the other wing will house chickens. A hatchery, labs and feed rooms will be located at the base of the "U". The new facility will also



Artist's rendering of the new Agriculture Research Service's poultry research facility, scheduled to be opened in May 2006.

include a shower and disinfection area and other facilities for employees who work in the labs. ●

Congress Considers Veterinary Workforce Expansion

Working to address the need for well-trained first responders for agroterrorism in the U.S., U.S. Senator Wayne Allard (R-Colorado) introduced the Veterinary Workforce Expansion Act in the Senate in early May. The American Veterinary Medical Association (AVMA), together with the Association of American Veterinary Medical Colleges, is urging Congress to protect the health of animals, that of the American public, and the safety of the U.S. food supply by passing and funding this legislation.

The federal government has not allocated general funding for veterinary medical education in nearly 30 years. According to the AVMA, neglect of veterinary medical education threatens not only the national economy but also the lives of U. S. citizens.

"Highly contagious avian influenza, foot and mouth disease

and mad cow disease are all naturally occurring threats that have the potential to severely impact animal health and welfare, food safety, and public health, and devastate the United States economy. As first responders, veterinarians are critical to preventing, diagnosing, and controlling biological agents that can be transmitted between animals and human beings," said AVMA President, Bonnie Beaver, DVM, MS.

The AVMA urges the public to take action by contacting their Senators and demanding funding of the Veterinary Workforce Expansion Act.

"The present shortage of veterinarians in public practice areas endangers the public health system in the United States," Dr. Beaver said. "We don't want to look back at this opportunity and say, 'We should have taken action.'" ●

Crawford Resigns as FDA Head

Food and Drug Administration (FDA) Commissioner Lester Crawford announced his resignation on Sept. 23, just two months following a lengthy approval process from the Senate.

Crawford was previously agency deputy and acting commissioner before taking the top post.

Health and Human Services Secretary Mike Leavitt accepted Crawford's resignation .

Dr. Andrew C. von Eschenbach will fill the position in the interim, in addition to his post at the National Cancer Institute,

Crawford, who received his DVM from Auburn University and a Ph.D. in pharmacology from the University of Georgia, prior to his roles with FDA, served as Administrator of the Food Safety and Inspection Service (USDA).

Poultry Industry Hit Hard by Katrina

The devastation caused by Hurricane Katrina has extended to the poultry industry in Mississippi and throughout the Gulf Coast region.

With approximately 9,000 poultry houses in Mississippi and over 2,000 poultry farmers, early estimates indicate that 2,400 poultry houses sustained damage. Of the damaged houses, approximately 300 are totally devastated.

According to the state department of agriculture and commerce, a poultry house typically contains 20,000 to 25,000 birds during the growth cycle, so the value lost due to Katrina is enormous when factoring in loss of production, loss of property, increased expenses associated with inflated energy costs, costs associated with debris clean-up, and income lost during recovery.

Mississippi produces 10 percent of U.S. broilers.

All 82 counties in Mississippi have been designated as eligible for the U.S. Department of Agriculture's various assistance programs, allowing farmers to recover some of the costs they have incurred as a result of the hurricane

damage. Assistance is being provided for the repair and rebuilding of livestock fencing, tree debris removal, and disposal of dead birds on poultry farms.

USDA's Natural Resource Conservation Service (NRCS) is granting \$1,250 per poultry house for disposal of birds in accordance with federal guidelines.

Mississippi State Veterinarian Dr. Jim Watson is coordinating animal health and care operations throughout the state. The state extension service and veterinary school are also playing a valuable role.

Mississippi State Veterinarian Dr. Jim Watson is coordinating animal health and care operations throughout the state. The state extension service and veterinary school are also playing a valuable role.

"MSU Extension Service agents and livestock specialists are helping us locate and assess the needs of poultry and livestock producers as we go from county to county in areas south of Hattiesburg," said

Dr. Carla Huston, a faculty member at the Mississippi State University (MSU) College of Veterinary Medicine working in the national Veterinary Medical Assistance Team command post in Hattiesburg.

"Supplies are available to help get producers through the crises, but we first have to know what is needed and where."

Insurers, like Aon Corporation, have begun the arduous process of calculating the damage.

"A million pounds of processed chicken is probably rotting in the heat right now," said Tami Griffin, senior vice president of Aon's agribusiness group on Sept. 6. "Mississippi produces ten percent of the nation's chickens, and most of the state's 14 processing plants are offline." She said some have been damaged and that many of them do not have power or water. In addition, many of the farms that supply chickens to the processors have been hit hard by the storm. Hundreds of chicken houses, many of which contain thousands of birds, were damaged. Griffin said it is difficult to estimate the full extent of the damage and that it may take weeks or months for full production to resume.

The National Chicken Council reported that all 14 chicken processing plants in Mississippi were back in operation by Sept. 8, with many running at pre-hurricane levels as they work to clear a backlog of chickens off the farms. However,

Veterinarians Respond . . .

AVMF photo



Veterinary Medical Assistance Teams (VMAT), have been deployed to the Gulf Coast region. VMATs, established by the American Veterinary Medical Association (AVMA) and funded primarily by the American Veterinary Medical Foundation (AVMF), are working as part of the Federal Emergency Management Agency (FEMA) National Disaster Medical System (NDMS) to care for injured animals, as well as provide advice concerning public health issues.

many farms are still operating on diesel-powered generators, and the need for diesel fuel in the region remains serious.

Sanderson Farms, Inc. estimated that, out of a total of 1,874 broiler houses in Mississippi, 72 were totally destroyed. Another 86 experienced considerable damage and will be unable to house broilers until repairs are made. In addition to broiler houses, two breeder houses out of a total of 187 in Mississippi were either totally destroyed or heavily damaged. As a result of these losses, the Company estimates that approximately 3.0 million head of broiler chickens out of an average live inventory of approximately 35.0 million head, ranging in age from seven days to 62 days, have been destroyed. Sanderson did not experience any significant damage to any of its Mississippi or Louisiana processing facilities, feed-mills or hatcheries.

Tyson Foods' four Mississippi poultry processing plants were idled early on, primarily because of the loss of power. All four are now back in operation. Tyson is estimating the financial impact of Katrina in the \$10 to \$20 million range. This reflects the loss of some live bird inventory, the temporary closure of processing plants and the loss of frozen product that was in storage at ports in Mississippi and Louisiana. It also includes insurance deductibles and other costs, such as efforts to support employees and communities in the effected areas.

Tyson Foods donated approximately one million meals to feed evacuees and relief workers in the aftermath of Hurricane Katrina, company officials reported. Tyson has also supplied pre-cooked and shelf-stable chicken to relief efforts in Carthage, Forest, Magee, Vicksburg and Jackson, Miss., sent shipments of food to help feed evacuees near Baton Rouge, Louis., as well as Fort Chaffee and Pine Bluff, Ark., and had provided truckloads of water and ice to communities in central Mississippi and sent teams of people to help cook food.

Sanderson Farms also has participated in the relief effort, providing ice, water, food and other necessities.

"While we have worked hard over the last week to get our operations back on line, a primary focus has been to respond to the needs of those along the Gulf

Coast and beyond," said Sanderson chairman and CEO Joe Sanderson, Jr. "We are fortunate that our company sustained only minimal damage and no loss of life as a result of the storm, and we will continue to help those whose lives have been more seriously disrupted."

The National Chicken Council said the hurricane will also impact poultry exports as ports along the Gulf of Mexico handle as much as 75 percent of the poultry exported from the United States to Russia, the largest market for U.S. chicken. ●

"While we have worked hard over the last week to get our operations back on line, a primary focus has been to respond to the needs of those along the Gulf Coast and beyond."

— JOE SANDERSON, JR.
SANDERSON FARMS CEO

News Briefs

FSIS Issues Final Rule On Nutrient Content Claims For Meat, Poultry Products

U.S. Department of Agriculture's Food Safety and Inspection Service (FSIS) has announced a final rule amending the federal meat and poultry products inspection regulations to allow nutrient content claims in meat and poultry product names. This action is intended to help consumers maintain healthy diets by providing detailed information they can use when making product choices. The rule becomes effective Jan. 1, 2008; however, establishments can voluntarily adopt the rule's provisions upon publication.

Model Food Security Plans Available

Agriculture Secretary Mike Johanns has announced the availability of model food security plans and training that meat, poultry and egg processing plants can utilize to strengthen security measures and prevent potential acts of intentional contamination.

The security of meat, poultry and egg processing facilities can be enhanced through the implementation of risk-management techniques tailored to each establishment's needs. Food security plans are valuable technical and operational resources that can help plant operators identify various types of preventive steps to minimize the risk of food product tampering or other criminal actions.

The model plans are available on the Internet at www.fsis.usda.gov. ●

AI Risk | Symposium sheds light on managing disease

(continued from page 1)

animal health has not been seen in our lifetimes, we are unprepared for a pandemic. Nonetheless, H5N1 in southeast Asia represents the greatest threat of pandemic seen in our working careers."

"Success in AI management depends on a strong, structured industry infrastructure with industry, government and scientific components working cooperatively."

—DR. BRUCE STEWART-BROWN
VP, FOOD SAFETY & QUALITY,
PERDUE FARMS

Domestic AI issues

It's advisable for poultry companies to prepare an AI risk management plan before one is needed, according to presenter Dr. Bruce Stewart-Brown, vice president of food safety and quality for Perdue Farms Inc. "When AI outbreaks occur, it's essential for poultry producers to be quick to respond and to be transparent with one another," Stewart-Brown says. "Success in AI management depends on a strong, structured industry infrastructure with industry, government and scientific components working cooperatively."

When tackling risk communication strategies, several challenges exist. "Facts concerning AI can be highly technical and difficult to understand, which often leads to inaccuracies in the press," Stewart-Brown says. "The public needs information they can understand relative to bird health, human health and food safety, so it's

important for the poultry industry to continue to help educate consumers."

Industry challenges for the future include implementing both flock and processing plant certification with 'AI Free' status, Stewart-Brown predicts.

International AI management

Cargill, Inc. processes 1.4 million broilers weekly at its Sun Valley operation in Thailand.

Symposium presenter Michael Robach, Cargill's vice president, food safety and regulatory affairs, is quick to point out that the firm's stringent international AI biosecurity management includes rigorous hygiene and isolation protocols for birds, facilities, vehicles and personnel.

"Monitoring and surveillance are continuous and ongoing," Robach emphasizes. "We find that early preparation is much better than late response."

Even though AI is very uncommon in U.S. poultry, AI outbreaks anywhere can decrease consumer confidence in U.S. poultry meat and provoke concerns about human health, says Dr. David Swayne, director of the USDA ARS Southeast Poultry Research Laboratory.

"Cooking and pasteurization can kill HPAI and low pathogenic AI virus," Swayne says. "The public health threat varies with the individual AI virus." ●

By Linda L. Leake, contributing writer

Federal Agencies Establish Agroterrorism Partnership with States, Industry

The U.S. Department of Agriculture (USDA), Department of Health and Human Services' Food and Drug Administration (FDA), Department of Homeland Security (DHS) and the Federal Bureau of Investigation (FBI) announced a new collaboration with states and private industry to protect the nation's food supply from terrorist threats.

"Ensuring the safety of our nation's food supply is a top priority for President Bush and USDA," said Agriculture Secretary Mike Johanns. "This partnership demonstrates our commitment as government and the private sector work together to protect

our agricultural commodities from terrorism. We look forward to working with our partners."

The Strategic Partnership Program Agroterrorism (SPPA) Initiative supports President Bush's requirements directing the government to work closely with states and industry to secure the nation's food supply.

Four pilot visits will be conducted in September and October. The purpose of these visits is to assess and identify vulnerabilities in the agriculture and food sectors.

Additional information about agrosecurity can be found on USDA's Web site at www.usda.gov/homelandsecurity.

Misused Non-Tariff Trade Barriers Costing Poultry Industry Millions of Dollars

Speaking at the annual convention of the American Veterinary Medical Association in Minneapolis this summer, Dr. Charles Hofacre of the University of Georgia College of Veterinary Medicine said trade harmonization has been challenging, to say the least, for the U.S. poultry industry.



Dr. Charles Hofacre

Hofacre, a professor and director of clinical services at the university's Poultry Diagnostic Research Center, said harmonization of trade between the nations of the world initially increased export opportunities for the U.S. poultry industry, an industry known for its ability to produce high quality turkey and broiler meat and eggs in large quantities at very reasonable costs.

"At its peak, nearly 18 percent of the U.S. broiler production was being exported," said Hofacre. "Many countries could import poultry products from the U.S. at prices lower than their own industry could produce." Therein lies the problem.

To prevent losses in their own poultry industries, importing countries have looked to legal means to slow or stop low priced U.S. poultry products. Using rules put in place by the World Trade Organization, or WTO, "the quickest means available was to place restrictions based on disease, food safety and antibiotic use," Hofacre noted.

Hofacre said the Russian Federation was among the first to use the strategy of non-tariff trade barriers based on food safety issues to halt U.S. poultry shipments, beginning in 1996. Citing unac-

ceptable levels of salmonella in broiler leg quarters and the presence of common poultry diseases, such as infectious laryngotracheitis, the Russian Federation has been successful in slowing and, in some instances, halting U.S. poultry shipments.

"The issue of falsely erected non-tariff trade barriers based on food safety issues has cost the poultry companies millions of dollars not just in lost sales but also in lost time of the veterinarians working for these companies," said Hofacre. "If an importing country's standards for food safety are genuinely higher than the exporting countries, then the exporter should meet these standards if they want that business."

On the other hand, says Hofacre, barriers based on fabricated food safety issues require veterinarians to be actively engaged in U.S. trade negotiations.

"As veterinarians, microbiologists or food scientists, we are trained to assess a situation, gain information logically and scientifi-

cally then take action," said Hofacre. These non-tariff trade barriers based on food safety issues have absolutely nothing to do with insuring the safety of the food supply for the consumers of these importing countries."

Based on public health information from around the world, Hofacre says the U.S. consumer has some of the lowest rates of food-borne illness. So, poultry products produced in the U.S. is in many instances safer than the products produced in the importing countries, he says. ●



FSIS Names New Leadership

The U.S. Department of Agriculture's Food Safety Inspection Service has welcomed two individuals into leadership roles in recent months.

Dr. Richard Raymond was named Under Secretary of Agriculture for Food Safety on Jul. 1. Raymond previously served as interim director of HHS Finance and Support in 2000 and as interim director of HHS in 2004 in Nebraska.

Agriculture Secretary Mike Johanns on Aug. 1 announced the appointment of Dr. Barbara Masters as Administrator of the Food Safety and Inspection Service (FSIS), overseeing the regulation of meat, poultry and processed egg products, which constitute 40 percent of the American food dollar. ●

"At its peak, nearly 18 percent of the U.S. broiler production was being exported. Many countries could import poultry products from the U.S. at prices lower than their own industry could produce."

— DR. CHARLES HOFACRE,
UNIVERSITY OF GEORGIA
COLLEGE OF VETERINARY
MEDICINE

Poultry '04 Study Results Released by NAHMS

USDA's Center for Epidemiology and Animal Health has completed an in-depth look at nontraditional poultry industries in the U.S., including small-production backyard flocks and live-poultry markets.

The Poultry '04 study addressed issues important to the U.S. poultry industry, including information on bird health, bird movement, and biosecurity practices of nontraditional poultry industries, such as backyard flocks, gamefowl, and live-bird markets.

Part I: Reference of Health and Management of Backyard/Small Production Flocks in the United States.

Highlights:

- On average, there were 29.4 residences located within a 1-mile radius of selected commercial poultry operations. Of these residences, 1.9 had birds other than pet birds

(backyard flocks).

- On average, backyard flocks had 35.1 birds, ranging from an average of 26.1 birds in the Southeast region to 49.2 birds in the East region.
- Nearly one in three backyard flocks (31.8) had fewer than 10 birds.
- Vaccinations were given to only 2.8 percent of backyard flocks.
- In general, reported health problems increased as flock size increased.
- Just over one-fifth of large backyard flocks (21.4 percent) reported respiratory problems.
- The most common reason for having birds was for "fun or hobby," which ranked "very high" for 40.6 percent of backyard flock owners. About one in four producers ranked family tradition, food and lifestyle, as "very high" reasons for having birds.

Part II: Reference of Health and Management of Gamefowl Breeder Flocks in the United States.

Highlights:

- Over half of premises (55.3 percent) had between 100 and 499 birds, and 7.5 percent had 500 or more birds.
- Overall, 18.2 percent of premises had used the services of a veterinarian in the previous 12 months.
- Use of injectable vitamins ranged from 46.5 percent of premises in the Northeast region to 83.1 percent

of premises in the West region.

- Just over half of premises (51.5 percent) introduced new birds into the flock one or more times during the previous 12 months.

Data Collection

Data was collected via questionnaires on biosecurity practices and on the health and movement of various bird species and then summarized for use in regional and national estimates. Participation is voluntary and the data is kept confidential.

The National Agricultural Statistics Service randomly selected a sample of commercial poultry operations in 18 of the nation's leading poultry states. A circle with a one-mile radius was drawn around each commercial operation, and a field data collector canvassed the circle for noncommercial premises that housed birds. From Oct. 1 through Nov. 15, 2004, federal and state animal health officials administered the questionnaire at participating noncommercial premises.

Earlier this year, a questionnaire was administered at live-poultry markets throughout the United States to gather information on management, bird movement, cleaning and disinfecting. Results from this part of the study will be available in the future.

The reports are available on the Internet at www.aphis.usda.gov/vs/ceah/ncahs/nahms/poultry/index.htm. ●

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