

CATTLE HEALTH REPORT

A National Institute for Animal Agriculture Publication

Summer 2005

Johne's Education Program Launched

The National Institute for Animal Agriculture (NIAA) is launching a collaborative effort between industry and government to educate producers, veterinarians and others involved in dairy and beef production about Johne's disease. The program is designed to help minimize risks and control Johne's disease, a bacterial disease of the intestinal tract that cause ruminants to waste away. The disease is prevalent in cattle, but is also found in other ruminants. It is estimated to cost the dairy industry in excess of \$200 million annually.

"The National Johne's Educational Initiative will enhance educational efforts about Johne's by utilizing previously available infor-



A cooperative effort of the National Institute for Animal Agriculture and USDA, APHIS, Veterinary Services, in association with the National Johne's Working Group & United States Animal Health Association

mation on the disease and coordinating the development of new materials that are needed," says Dr. Ken Olson, Johne's education coordinator for NIAA. "The goal is to control and reduce incidence of Johne's in the U.S."

NIAA is working with USDA on the initiative to implement a strategic plan adopted last year by the Johne's committee of the <None>

U.S. Animal Health Association. The collaborative effort provides a focal point for collection and distribution of Johne's information, according to Olson.

"Through this initiative, we will be reviewing existing publications and information as well as identifying additional educational needs for producers and those who work with them," says Olson.

The initiative will help producers in three key areas:

- Minimize the risk of Johne's entering their herd through implementation of proven management practices;
- Reduce the economic impact in herds with the disease through enhanced management; and
- Eliminate Johne's as a factor in dairy and beef production.

More information on the Initiative will be available on the Internet at www.animalagriculture.org/johnes. ●

Inside This Issue...

PAGE 2
Federal Agencies Establish
Agroterrorism Partnership with
States, Industry

PAGE 3
BSE Investigations Yield
Negatives; New Protocol
Announced

PAGE 4
USAHA Hosts Brucellosis
Workshop

PAGE 5
Bovine TB Detected in Minnesota
Herd

PAGES 6-7
News Briefs

PAGE 8
NAS Publishes Study on
Agroterrorism Attack

USDA Opens Door for Private NAIS

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

See *Private NAIS* | page 7

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) recently 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 priori-

ty 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. Announced today at the Food and Agriculture Sector Coordinating Council meeting, 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.

"As one of the lead federal agencies charged with protecting our nation's food supply, the FDA fully supports this initiative encouraging a closer working relationship with our partners in federal and state government, as well as the private sector to make the nation's food even safer," said FDA Commissioner Dr. Lester Crawford. "This partnership brings together all of the organizations that have the best knowledge and abilities in safeguarding the food we eat starting from the farm all the way to our kitchen tables."

Over the next year, teams of federal and state officials will travel to all 50 states to meet with all sectors of the food chain. Together, the federal, state and private industry partners will discuss security issues from farm-to-table and consider ways to better protect our food supply.

"We are pleased to participate in this important initiative to enhance the overall security of our nation's food and agricultural infrastructure," said Robert Stephan, Assistant Secretary for Infrastructure Protection, U.S. Department of Homeland Security. "The health of our citizens and our economy depend on our ability to conduct assessments, validate field information and provide guidance that can be shared with our federal, state and local, tribal as well as private sector partners."

These visits will help the federal partners better consider how states and industry can protect the food supply, gain more information about the food industry's protection needs and assist government and private industry in refining its efforts including research and development goals.

This effort is the second major joint initiative for the federal partners. In May 2005, FBI, with the support of DHS, USDA and FDA hosted the first ever International Symposium for Agrosecurity in Kansas City, Mo.

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



The newly developed partnership will address security of the food supply, reaching across all sectors of the industry, including on-farm.



Cattle Health Report

Summer 2005

Publisher

National Institute for
Animal Agriculture
Glenn N. Slack, President & CEO

Benjamin Richey, Editor

Cattle Health Report provides the latest information on issues pertinent to cattle health initiatives, strategies, research and regulatory action. It is a communications initiative of the NIAA Cattle Health Committee and is produced in cooperation with USDA-APHIS. Reprinting is encouraged.

For a free subscription, send your name and mailing address to NIAA at:
1910 Lyda Avenue

Bowling Green, KY 42104-5809
ph.: 270-782-9798 fax: 270-782-0188
niaa@animalagriculture.org
Web site: www.animalagriculture.org

BSE Investigation Completed

The U.S. Department of Agriculture's Animal and Plant Health Inspection Service (APHIS) and the U.S. Department of Health and Human Services' Food and Drug Administration (FDA) have completed their investigations regarding a cow that tested positive for bovine spongiform encephalopathy (BSE) in June 2005. The agencies conducted these investigations in collaboration with the Texas Animal Health Commission and the Texas Feed and Fertilizer Control Service.

The 12-year old Brahman-cross carcass was destroyed at a pet food plant in Texas, following the sampling for BSE. It was determined the cow was infected prior to 1997, APHIS attempted to trace all adult animals that left the index farm after 1990, as well as all progeny born within 2 years of the index animal's death. Sixty-seven cohorts

were tested, all coming back negative. APHIS also attempted to trace some 400 other animals of interest, finding no other positives.

An investigation of feed and feed supplements found that none - used on the farm since 1997 were formulated to contain prohibited mammalian protein. Due to this finding, FDA has concluded that the animal was most likely infected prior to the 1997 BSE/ruminant feed rule.

A review of the inspection history of rendering firms involved with the investigation found no violations of the FDA feed ban rule.

APHIS and FDA expressed pleasure with the results of the investigations, which show the animals of interest did not present a threat to livestock and that the ruminant feed rule is being followed. ●

OIE Changes Indicate BSE is Not a Food Safety Issue

Discussions on bovine spongiform encephalopathy (BSE) have led to changes to the BSE chapter in the Terrestrial Animal Health Code of the World Organization for Animal Health (OIE) at their 73rd Annual General Session in May. The changes come following a consideration of new scientific knowledge. New classifications for the BSE categories for member countries, and a new list of several animal products without risks for consumers are included in the changes.

U.S. Department of Agriculture Secretary Mike Johanns was very supportive of the moves made by OIE on BSE.

"The United States and several other countries have advocated for guidelines that reflect science, the

low risk associated with BSE, and the effectiveness of risk mitigation measures," said Johanns. "The international standard for BSE is now based on the same information that has guided the United States' current practices and the proposed minimal risk rule."

National Institute for Animal Agriculture president and CEO Glenn Slack attended the meeting, held in Paris, France, as an observer.

"International standards for bovine spongiform encephalopathy (BSE) were revised here today to officially recognize boneless beef from animals less than 30 months of age as a product of no-risk," said Slack. "The addition to the list of non-risk products endorses scientific conclusions that boneless beef can be traded without regard to a

Jarrett Honored with AVMA's Highest Award

The late Dr. James Jarrett, former executive vice president of the American Association of Bovine Practitioners, was honored in mid-July by the American Veterinary Medical Association at their annual convention in Minneapolis. Jarrett was posthumously presented with the AVMA's highest award, which recognized individuals that have made distinguished contributions to the advancement of veterinary organizations.

"He was passionate about everything he did," said Jarrett's daughter Joy Shealy. "He wanted to make a difference in the profession. He lives on in this profession in your work and your lives and in how you contribute."

Jarrett helped to form AABP in 1964, and is remembered for his contributions to the dairy industry. ●

country's BSE status if appropriate preventive measures have been implemented."

Slack also noted that changes made to streamline the system for classifying countries according to relative risk for BSE will now provide focus on the steps countries take in BSE-risk reduction.

Slack added that the OIE delegates have directed experts to study the significance of an animal's age to determine if its policy that beef muscle from animals over 30 months presents a higher risk is scientifically sound, making additional modernization of the BSE code a possibility in 2006.

The revisions can be found on the Internet at www.oie.int/eng/press/en_050602.htm. ●

USAHA Holds Workshop on Brucellosis Vaccines, Diagnostics and Delivery Systems

New solutions to an old problem were discussed during a three-day workshop held at the University of Wyoming recently. The workshop brought together more than 50 top researchers and scientists from across the nation as well as from Canada, Russia and New Zealand to focus on brucellosis in bison and elk, and to identify new and improved brucellosis vaccines and diagnostic tools, as well as systems to deliver those vaccines.

The workshop, underwritten by the United States Department of Agriculture's Animal and Plant Health Inspection Service, and the Department of Interior's National Park Service, U.S. Fish and Wildlife Service, and U.S. Geological Survey, was planned by a special committee appointed by United States Animal Health Association (USAHA) President Rick Willer.

"The committee was appointed to address the extremely complex brucellosis issues in the Greater Yellowstone Area," said Willer. "My first charge to the special committee was to come up with a research roadmap to address the shortfalls in existing vaccines, delivery systems and diagnostic tools," Willer added.

The workshop participants identified immediate projects to address brucellosis in bison and elk, including analysis of existing knowledge on vaccine efficacy, new challenge studies, improvement of bio-bullet delivery, standardization of test protocols and establishing a network of collaborating scientists. Longer term projects discussed during the workshop included identification and testing of new vaccines and delivery systems, improvement of diagnostic tools, better understanding of disease processes in

bison and elk, and identifying innovative funding sources.

USAHA President-Elect Bret Marsh, chair of the special committee, reported that the workshop was a tremendous success. "We expect that a draft report from the workshop will be shared at USAHA's Annual Meeting in Hershey, Pennsylvania, November 3-9, 2005,

as well as in a number of different forums," Marsh said. "The report will lend credibility for Congressional requests to fund future research initiatives that will help address brucellosis control and eradication in bison and elk," Marsh added. In addition, Marsh anticipated exploring other avenues for funding outside of government. ●

Ridding GYA of Brucellosis

Though Montana, Idaho and Wyoming do not currently have any identified cases of brucellosis in their cattle herds, the on-going risk of brucellosis from wildlife in the Greater Yellowstone Area (GYA) persists. USDA's Animal and Plant Health Inspection Service continues efforts with state agencies to pursue eradication of the disease from the GYA.

APHIS began a program to control and prevent brucellosis in 1934, moving that to an eradication goal in 1954. Currently, the eradication program is in emergency mode, with enhanced efforts to complete eradication of the disease from the U.S. domestic cattle herd and to minimize risks of re-infection.

APHIS has concentrated resources on the GYA, due to the potential risks of the disease in wildlife impacting livestock production in that area.

"APHIS provides personnel, funding and technical support for that area," said Dr. Arnold Gertonson, APHIS Yellowstone Brucellosis Coordinator, noting that APHIS staff works with states in their surveillance and [epidemiological] investigations. "We are using all tools available, under our authority, to reach the goal of eradication in the U.S."

APHIS is involved in a variety of developmental projects, such as researching vaccination issues, immunocontraception studies and other studies involving modes of transmission of brucellosis. Specifically, APHIS is cooperating with Montana Department of Fish, Wildlife and Parks, Montana Department of Agriculture and Yellowstone National Park on a feasibility study of quarantining and testing bison as a method to restore brucellosis-free bison to federal and Native American lands.

The feasibility study is set up in three phases. In phase one, bison that have left Yellowstone are captured, tested and kept in quarantine. If tests are negative, the animals are bred as part of phase two. Phase three involves the calving of bison, and reintroduction to the wild if negative for the disease. The bison would then be monitored for brucellosis.

We'd like to get up to 100 head annually, depending on availability," said Gertonson. "But this is a feasibility study, so we can evaluate this system on a small scale to determine if this could be a practical program to restore brucellosis-free bison herds."

More information on brucellosis in the GYA is available at www.aphis.usda.gov. ●

Bovine TB Detected in Minnesota Cattle Herd

The Minnesota Board of Animal Health (BAH), in conjunction with the U.S. Department of Agriculture (USDA), has detected bovine tuberculosis (TB) in a Roseau County beef cattle herd. The initial case of TB was detected during routine slaughter surveillance when a USDA veterinarian detected suspicious lesions in a five-year-old cow. Tissue samples were submitted to the National Veterinary Services Laboratory (NVSL) in Ames, Iowa, where a diagnosis of bovine TB was confirmed. The cow was traced back to northern Minnesota using a 'back tag' placed on the cow prior to being sold for slaughter. The herd of

origin was quarantined, tested, and an investigation initiated.

"The entire herd was tested in order to verify the herd was infected," said BAH Executive Director and State Veterinarian Dr. Bill Hartmann. "All animals that tested suspect for the disease were purchased by the USDA for further testing."

Further testing at the Minnesota Veterinary Diagnostic Laboratory revealed that the majority of the suspect animals had internal lesions consistent with bovine TB. The disease control protocol for continued eradication of this disease calls for depopulation of the infected herd. ●

Michigan State Opens Training Center for Dairy Professionals

Through a unique relationship between Michigan State University and Green Meadow Farms, Inc., a large dairy operation in Elsie, MSU veterinary students and others will be able to receive specialized training in caring for dairy practices.

The center extends the long-standing cooperation between the MSU College of Veterinary Medicine and Green Meadow Farms, Inc., and was made possible by major donations from Land O'Lakes Purina Feed LLC and GreenStone Farm Credit Services.

The center makes use of Green Meadow Farms' large dairy herd, modern facilities, and highly developed management infrastructure, along with the college's faculty and facilities, to provide specialized training in dairy practice for veterinary students, preveterinary students, graduate veterinarians and other professionals serving the dairy industry.

As the center evolves, it is antici-

pated that students from the College of Agriculture and Natural Resources, as well as students from other universities, will study there.

The center will also provide facilities and demonstration material for the continuing education of veterinarians and other professionals working in the dairy industry and create an infrastructure for clinical research in the health management of dairy cows.

"The changing demographics of the dairy industry are driving a change in the role of dairy veterinarians," said Thomas Herdt, chairperson of the MSU Department of Large Animal Clinical Sciences.

From 1997 to 2001, the number of dairy herds in Michigan with more than 500 cows increased from 35 to 65, while the number with 100 to 199 cows decreased from 850 to 620.

For information on the MSU College of Veterinary Medicine, visit the Web at www.cvm.msu.edu. ●

"Healthy Wildlife" is Focus of USAHA's Annual Meeting

"Healthy North American Wildlife Initiative" is the theme of a joint scientific session of the 109th Annual Meeting of the United States Animal Health Association (USAHA) and the 48th Annual Meeting of the American Association of Veterinary Laboratory Diagnosticians (AAVLD) at the Hershey Lodge and Conference Center, Nov. 3-9, in Hershey, Pa.

Featured speakers at the scientific session include: Dr. Alex Thiermann, president of the Terrestrial Animal Health Standards of the World Organization for Animal Health (OIE), Dr. Brian Evans, chief veterinary officer for Canada, and Dr. Ted Leighton, executive director of the Canadian Cooperative Wildlife Health Centre. They and other wildlife experts will address health concerns at the interface of wildlife, people and domestic animals. The USAHA annual meeting is open to animal health officials, producers, veterinarians, researchers, laboratory officials, wildlife disease specialists, allied organizations and others with an interest in animal and human health and food safety.

Other topics that will receive special attention at the week-long meeting include the National Animal Identification System (NAIS), Animal Emergency Preparedness and Management, and Assessment of Risk in the Food Supply.

Program and registration information is available on the Internet at www.usaha.org. ●

News Briefs News Briefs News Briefs News Briefs

Crawford Appointed FDA Commissioner

The Senate has confirmed Dr. Lester Crawford to serve as head of the Food and Drug Administration. He has previously served as acting commissioner. Crawford was confirmed by the Senate to be FDA Commissioner on July 18, 2005, by a majority of 78 to 16.

Crawford, who received his Doctor of Veterinary Medicine from Auburn University and a Ph.D. in pharmacology from the University of Georgia, filled the role of Department of Physiology-Pharmacology at the University of Georgia Chair prior to working for FDA. He has also served as Administrator of the Food Safety and Inspection Service (USDA).

"The appointment of Dr. Crawford, a recognized authority in veterinary medicine, to the position of commissioner of the Food and Drug Administration underscores the important link between public health and animal health," said AVMA President Henry E. Childers. "The American Veterinary Medical Association is extremely proud of our colleague and commends President Bush and Congress for recognizing the invaluable contribution veterinary medicine makes, and will continue to make, to public health and safety."

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, which 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 bill, S. 914 resides in the Senate Health, Education, Labor, and Pensions committee.

Russell First American Elected WVA President

Dr. Leon H. Russell Jr. became the first American elected president of the World Veterinary Association during the American Veterinary Medical Association's annual convention in July.

For the next three years, Dr. Russell, whose candidacy was endorsed by the AVMA, will head the world's oldest international professional organization comprising nearly a hundred member countries.

"I'm very honored and humbled by your vote," Dr. Russell told members of the WVA Presidents'

Assembly who elected him. "I will be president to everyone, and I will hear you when you speak."

Dr. Johnson S. M. Chiang of Taiwan and Dr. Faouzi Kechrid of Tunisia were elected as the association's two vice presidents. The Presidents' Assembly was convened in Minneapolis for the 28th World Veterinary Congress, which last met in the United States in 1934.

The WVA works closely with the Food and Agriculture Organization of the United Nations, World Organization for Animal Health (OIE), World Health Organization, and similar organizations on matters of food safety, food security, antimicrobial resistance, animal welfare, and zoonotic diseases.

Dr. Russell of College Station, Texas, is a professor at Texas A&M University College of Veterinary Medicine and Biomedical Sciences and a diplomate of the American College of Veterinary Preventive Medicine. He also has a PhD degree in veterinary microbiology, as well as a master's in public health.

From AVMA's Convention Daily News, July 20, 2005.

Hueston Honored at AVMA

Dr. William Hueston, director of the Center for Animal Health and Food Safety at the University of Minnesota was honored at the recent annual convention of the American Veterinary Medical Association. Hueston received the Karl F. Meyer-James H. Steele Gold Head Cane Award, recognizing individuals concerned with animal health who have advanced human health through the practice of veterinary epidemiology and public health. The award was sponsored by Hartz Mountain Corp.

News Briefs News Briefs News Briefs News Briefs

Texas Animal Health Commission Begins "Real" ID Trial

Through the rest of the year, livestock identification in Texas is moving from the drawing board to field conditions to test identification devices, equipment durability and reliability. Using USDA cooperative agreement funding, the Texas Animal Health Commission (TAHC) has awarded contracts to four manufacturers of radio frequency ear tags (RFID), five makers of tag "reader" devices, four computer software providers and a data trustee to maintain the computer records.

Tag readers and computers are set up in several livestock markets, and customers of these facilities will be issued RFID ear tags for cattle

that will be marketed through the livestock markets. Two cattle firms that purchase from the three markets also will be equipped to record and report movement information as cattle are sorted and shipped to feedlots in the Texas Panhandle.

About 80,000 of the radio frequency ear tags, known as RFID tags, are being provided by Allflex USA; Farnam, Temple Tag Company and Y-Text. The tags, to be placed on cattle, sheep and domestic deer, emit a low-frequency signal that is picked up and "read" by a device as small as a handheld wand, or as large as a gate, panel or chute. Tag readers, supplied by AgInfoLink, AllflexUSA, Farnam, Temple Tag Company and Y-Text, will be tested for speed and durability in "real-life" conditions.

CSU Announces New Cattle Research Facility

Colorado State University is honored to announce that the research facility in Lamar owned by the Five Rivers Ranch Cattle Feeding LLC feedyard has been donated to the College of Agricultural Sciences. The gift, valued at \$2.5 million, establishes the Southeastern Colorado Research Center, which will become a powerhouse for animal food safety, nutrition, environmental impact and management research within the Department of Animal Sciences.

The \$2.5 million gift establishes a research center to be used by faculty and students for the research of animal food safety, nutrition, environmental impact and management. ●

Private NAIS | USDA charges industry to provide solution

(continued from page 1)

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.

The National Cattlemen's Beef Association (NCBA) has been a vocal advocate of the private system for several months. NCBA says it will be beta-testing a system this fall, and expect to have it running by early 2006. Details of this system have not been disclosed, however NCBA has been advocating an industry consortium to manage the

private database.

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.

A majority of livestock groups have been fairly quiet since the announcement. Capitol Hill, on the other hand, has seen statements in support of USDA's move. Rep. Bob Goodlatte, (R-VA) said, "By harnessing the innovation and efficiency of the private sector, we can achieve success quickly, inexpensively and without excessive government control."

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

NAS Publishes Study on Analysis of Bioterrorism Attack

Focus on botulinum toxin in milk; Debate ensues on security

A Stanford study addressing the potential for a bioterrorism attack on the food supply has been published by the National Academy of Sciences (NAS), following concerns that the research might divulge information that could be used against food production in the form of terrorism.

Researchers developed a mathematical model of a dairy supply chain, from the farm to consumers using a single processing facility, incorporating an intentional release of a botulinum toxin. The study looks at levels of the toxin in the milk, and corresponding infection at the consumer levels through the model.

The study provides insight into preventing deliberate attacks for the food supply, but the release of the information has raised the eyebrows of many concerned with protecting the food supply, in particular the

Department of Health and Human Services (HHS). The concern is making the results easily available, something that could be used by those with malicious intent. HHS called the paper a "a road map for terrorists and publication is not in the interests of the United States" in a letter to NAS.

Upon publication, Dr. Bruce Alberts, President of the National Academy of Sciences, included an editorial in the Proceedings of the National Academy of Science (vol. 102, no. 28) explaining the importance of the scientific contribution and how the information can be used to further scientific advances. "Because science advances through the combination of knowledge in unexpected ways, the discoveries of each individual scientist must be made available to a wide variety of other scientists, who can then either build upon them or criticize them," said Alberts in the article. He also noted that the understanding of risks by state and federal governments in addition to the general

public will help us to "optimally" protect against terrorist attacks.

National Milk Producers Federation president and CEO Jerry Kozak said in a commentary that we do not live free of fear in today's society, and this research serves as a reminder of that.

"The good news through all of this focus on the potential vulnerability of our food supply to terrorist attack is that most Americans recognize that no system, no matter how proactive or secure, is ever going to be 100 percent invulnerable – nor would we want to live in a society that operates under those rules," he said. Kozak also highlighted the fact that the dairy industry has "been working quietly the past four years to reduce the threats that terrorists may pose to the milk supply."

The study, Analyzing a bioterror attack on the food supply: The case of botulinum toxin in milk, was done by Lawrence M. Wein and Yifan Liu at Stanford University. The report can be found on the Internet at www.pnas.org. ●

Cattle
Health Report
 National Institute for Animal Agriculture
 1910 Lyda Avenue
 Bowling Green, KY 42104

Non-Profit Organization
 U.S. POSTAGE
PAID
 Permit No. 82
 Bowling Green, KY
 42104

Disease-Related Trade Restrictions Impact Markets in 2004

The U.S. Department of Agriculture's Economic Research Service has released a report highlighting trade effects stemming from disease outbreaks. The disease outbreaks and related trade restrictions that affected U.S. animal product markets in 2003 continued to constrain markets in 2004.

According to the report, U.S. cattle and beef markets were most affected. Pork, dairy and lamb markets did not face any direct

disease issues, however outbreaks of avian influenza worldwide did impact poultry markets.

Additionally, 2005 forecasts of U.S. animal product trade reflect expected market responses based on the uncertainties surrounding cattle and beef markets in the U.S.

The report, published on Aug. 5, can be accessed on the Internet at www.ers.usda.gov/publications/LDP/05/ldpm13301/.