

Cattle HEALTH REPORT

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Responsible Use of Antibiotics in Food Animals

Activists continue to apply increased pressure on antibiotic use in food-producing animals, and activists' messages are being more than heard. They are being seen. Billboards posted by Chipotle Grill state "Get antibiotics from your doctor, not your beef." Similar Chipotle Grill billboards have been aimed at the poultry industry.

Numerous food service companies have zeroed in on the public's concern with antibiotic use in food animals and have developed their own antibiotic guidelines. Wendy's, for example, has developed its own antibiotic use policies. Under "Managed Use," Wendy's policy states that "antibiotics used to treat food animals must only be administered by licensed veterinarians that have met all training and certification requirements." Its "Human Health" guideline reads "Reduce overall antibiotic usage in food animals, especially when the class of antibiotics used is both a human and food animal medicine. Employ alternative therapies, or use antibiotics not used to treat human disease whenever possible."

Negative and frequently inaccurate headlines, editorials and messages on the Internet feed the frenzy.

Concerned groups have been heard. On Feb. 8, 2007, Rep. Louise Slaughter (D-NY) sponsored H.R. 962, The Preservation of Antibiotics for Medical Treatment Act of 2007, which seeks to cut antibiotic resistance linked to the misuse of antibiotics in animal agriculture. Just four days later on Feb. 12, Sen. Edward Kennedy (D-MA) introduced the same bill in the Senate, S. 549.

Other bills with the same title were introduced in previous Congressional sessions: 109th Congress, H.R. 2562; 109th Congress, S. 742; and 108th Congress, S. 1460. These bills failed to make it through the legislative process.

The 2007 Bill would phase out the use as animal feed additives of antibiotics that are also important in human medicine, including penicillin, within two years. The bill also requires pharmaceutical companies manufacturing and marketing agricultural antibiotics to submit data on the quantity of drugs they sell, along with information on the claimed purpose and dosage for those drugs. The intention is to help public health officials track the implementation of the phase-out.

(Note: To track this bill, visit www.govtrack.us, then click on "New Bills" under "Track Congress".)

Antibiotic-Resistant Bacteria Concern

The American Medical Association, the Infectious Diseases Society of America and the American Academy of Pediatrics are among the more than 350 health and other groups nationwide that have endorsed The Preservation of Antibiotics for Medical Treatment Act of 2007.

Public concerns about the potential for antibiotic-resistant bacteria to develop in animals and transfer to humans are not a new issue. Concerns can be traced to the late 1960s—just 20-some years after the first antibiotic, penicillin, was available to the general public.

The food animal industry has taken numerous steps to address the concerns.

"Numerous safeguards have been put into place to ensure that antibiotics are used properly in animals and to minimize the potential for antibiotic-resistant bacteria to transfer to humans," states Forrest L. Roberts, Marketing Manager, Beef Business Unit, Elanco Animal Health.

"Judicious use guidelines developed by the American Veterinary Medical Association with the assistance from several species-specific

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Clifford Reports NAIS Progress to NIAA ID Committee

The U.S. Department of Agriculture's (USDA) Animal and Plant Health Inspection Service (APHIS) Veterinary Services Deputy Administrator Dr. John Clifford, said the implementation of the National Animal Identification System (NAIS) was making "excellent progress," citing the fact that nearly 380,000 (397,000 as of June 8, 2007) premises had been registered and 14 animal tracking databases (ATDs) and an animal identification numbering (AIN) system are in place.

Dr. Clifford opened the program for the Animal Identification and Information Systems Committee meeting at the NIAA annual meeting in Sacramento in early April.

Dr. Clifford reported that a grant had been awarded to the National Pork Board to register swine premises (see story on page 3) as part of a \$6 million fund established for non-profit organizations to conduct premises

registration, outreach and education. He encouraged other organizations to apply for grants at www.grants.gov.

He also noted that a Tribal Premises Registration System is now available.

Official ID devices have been defined by USDA, according to Dr. Clifford, with "minimum performance standards and must have on it an AIN, the U.S. Shield and the words 'Unlawful to Remove' imprinted on each device." In addition, radio frequency identification (RFID) devices are allowed.

Regarding RFID devices, he said, "The USDA retains its policy of being 'technology neutral' and relies on industry to recommend ID methods, performance requirements and technology standards."

Dr. Clifford said that APHIS was in the process of printing specifications for sow tags

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veterinary organizations have also been adopted for each individual animal species to ensure the right drug is used at the right time for the right bacteria."

The guidelines are supported by both the Centers for Disease Control and Prevention (CDC) and the Food and Drug Administration.

Government surveillance programs serve as early warning systems to monitor changes in antibiotic-resistance levels. Through the National Antimicrobial Resistance Monitoring System (NARMS), the U.S. Department of Agriculture monitors antibiotic resistant levels in animals, and the CCC monitors for changes in levels of antibiotic resistance food-borne human pathogens. Data shows levels of antibiotic resistance in animals have been low and stable, and levels in humans have generally declined since monitoring began in the late 1990s.

Judicious Use of Antimicrobials

The Center for Veterinary Medicine (CVM) emphasizes the judicious use of antimicrobials in food-producing animals and has developed products targeting veterinarians as a part of its Food Safety Initiative (FSI) Education Program.

CVM guidelines and videos are available for veterinarians on beef and dairy cattle, poultry and swine as well as on aquatic animals at

<http://www.fda.gov/cvm/JudUse.htm>. Likewise CVM judicious use of antimicrobial guidelines and videos are available for beef, dairy, pork and poultry producers at <http://www.fda.gov/cvm/JudUse.htm>.

Various national species organizations also have developed judicious use of antimicrobial guidelines that underpin those created by the CVM.

The American Veterinary Medical Association's 15 general principles of judicious use that Roberts referred to gave impetus to the National Pork Board's shared program between pork producers, veterinarians, animal health companies and feed companies. Called Take Care™, the program educates the swine industry on responsible antibiotic use and assures consumers the right steps are being taken. Developed in cooperation with the American Association of Swine Veterinarians as well as other industry organizations, the program consists of five principles for responsible antibiotic use and six specific guidelines for implementation.

"Take Care" defines the standards for responsible use of antibiotics in pork production in a way that is producer friendly and takes into account existing science, animal welfare and animal health," said Dr. Liz Wagstrom, assistant vice president of science and technology for National Pork Board. "It intends to set

the standards for antibiotic use in the pork industry before consumer groups or food service companies dictate them for us."

Responsible Food Animal Industry

The Coalition for Animal Health serves as the food animal industry's watchdog and spokesman, overseeing food animal health issues. The Coalition's mission is to support the use of sound science and risk assessment in decision-making by government regulatory agencies and to provide sound scientific information for use in policy changes and debate. This group also responds to public dialog on issues related to animal health.

In addition to monitoring trends in animal health product usage, the Coalition advocates prudent use of animal drugs in food animal production.

The Coalition for Animal Health is a partnership of major national trade associations representing animal production, animal feed, animal health, veterinary medicine and related industries. Partners include the American Farm Bureau Federation, American Feed Industry Association, Animal Health Institute, American Sheep Industry Association, American Veterinary Medical Association, National Chicken Council, National Cattlemen's Beef Association, National Pork Producers Council and National Turkey Federation. ●

Clifford Reports (cont'd from page 1)

for swine producers and that the Equine Working Group had recommended RFID devices using ISO 11784/85 standards. Also, manufacturers' applications for RFID injectable transponders for use in horses are now being accepted.

While Dr. Clifford emphasized that APHIS will participate in industry initiatives to facilitate standards for emerging, developing technologies, he also discussed one of the oldest technologies used for animal ID. "Brands have always been a part of animal ID in this country. They are often an asset to our disease eradication programs such as tuberculosis and brucellosis, and they will continue to be," Dr. Clifford declared. He said that an official Branding Group had been established and is working to develop how that system can be adopted for NAIS purposes.

Dr. Clifford also reported on the status of the private and State Animal Tracking Databases (ATDs) and USDA's Animal Trace Processing System (ATPS). Working with states and industry, USDA developed the ATPS which establishes the communication and messaging system with the ATDs for animal health officials to use in disease events when animal movement data is needed. In addition, states

and industry collaborated on the development of the technical specifications for integration of ATDs with the ATPS. USDA released a document outlining those technical specifications on February 1. USDA is now establishing formal cooperative agreements with interested organizations whose systems meet the technical requirements.

He concluded by reiterating the fact that access to the data through the ATPS is restricted to the following situations:

- An indication (suspect, presumptive positive, etc.) or confirmed positive test of a foreign animal disease;
- An animal disease emergency as determined by the Secretary of Agriculture and/or State Departments of Agriculture; or
- A need to conduct a traceback/traceforward to determine the origin of infection for a program disease (brucellosis, tuberculosis, etc).

In the question and answer session which followed the formal presentation, Dr. Clifford once again emphasized the point that NAIS would remain voluntary on the federal level and that with the databases being in private or state hands, producers could be assured that their data would remain confidential. ●



Cattle Health Report Summer 2007

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.

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Johne's Update

Uncertainty about the level of federal funding for Johne's programs resulted in initial cuts in state cooperative agreements. This impacted state Johne's program plans and activities in early 2007. When Congress finalized the budget, much of the funding was restored. This is positive for the current program year; however, details are still being worked out with individual state programs. The funding uncertainty and resulting need for program modifications has stimulated action to evaluate existing programs, identify their critical components and assess how to move forward most effectively with reduced federal funding in the future. These activities are occurring on several fronts. The combined results of these efforts will help to determine the future direction of the Johne's program.

Producer Survey – Plans are moving forward for a national dairy producer survey to help identify barriers to participation in the Johne's program, as well as information and/or incentives that are likely to stimulate producer participation in the program. Additional input will be sought from other program users. This is part of the Education and Outreach effort of the Johne's Disease Integrated Program (JDIP). Results will be used collaboratively by JDIP, the National Johne's Work Group (NJWG) and the Johne's Education Initiative (JEI) to develop materials that meet the identified needs.

While the survey moves forward, other JDIP researchers are evaluating the effectiveness and costs benefits of currently recom-

mended control practices as well as reviewing components of the current program.

NJWG at NIAA - The meeting of the National Johne's Work Group (NJWG) held during the NIAA Annual Meeting focused on the needs and future directions for the *Voluntary Bovine Johne's Disease Control Program*. The following priorities were identified:

1. Risk Assessments were identified as the most critical part of the program. They lay the groundwork for the program and get people working with the program onto farms.
2. It is important that all possible steps be taken to assure the success of the Producer Survey. Responses are needed from a statistically valid sample of all producers.
3. The Demonstration Herd project has substantial value that is just being recognized. An end date needs to be set for the program, but it needs to be maintained long enough to complete the data capture and analysis phase of the project.
4. Johne's program representatives should go to producer meetings to hear their needs. Through JEI, NJWG and JDIP we will continue to seek additional input on needs and direction for the program and develop a strategy for addressing them.

Two other highlights of the meeting were updates on the Johne's "White Paper" that assesses impacts on dairy if a link were established between Johne's and Crohn's Disease and the initial economic analysis from the National Demonstration Herd proj-

ect. PowerPoint slide sets from meeting presentations may be found on the JEI site www.johnesdisease.org.

Best Test – Producers have access to a variety of tests for Johne's disease, but all have advantages and disadvantages. No single test is best in all situations. A group of nationally recognized Johne's researchers working through a cooperative agreement with VS have developed a guide to help veterinarians and producers select the "best test" for a given herd situation. The publication is available at <http://avmajournals.avma.org/doi/pdf/10.2460/jauma.229.12.1912>. At the same time, JDIP scientists are working to develop new, more rapid and accurate diagnostics and therapeutics.

Milk ELISA – An increasing number of producers are using milk ELISA testing in their Johne's management or control programs. In February, Prionics and Antel BioSystems, Inc. received USDA approval for the extension of the label use of the Parachek® test to include diagnosis of Johne's disease in bovine milk samples. This does not make it an "Official Test," but does validate its use as a tool for control in infected herds.

JEI Website – The JEI website www.johnesdisease.org continues to be updated as new information becomes available. Recent additions include added states with "program herds" (herds in the test-negative part of the Program), updates on state Johne's contacts and Johne's presentations from the NIAA meeting. ●

Brand New NAIS Working Group

The National Animal Identification System (NAIS) has expanded beyond species working groups to issues working groups, and the first issues working group is the brand states working group. Formed by USDA, the brand states working group is comprised of animal brand authorities, state veterinarians and animal identification coordinators from states with existing brand inspection programs for the key purpose of promoting and advancing NAIS.

The first meeting of the working group was conducted in late January, with another meeting scheduled for July. The July meeting will center on interpreting the results of a survey that was sent to the brand states and using that information on a practical basis.

Although brand inspection programs tend to differ from state to state, in scope and in information recorded, states do not customarily use brands as identification for animal health purposes, Bruce Knight, undersec-

retary for USDA's marketing and regulatory programs mission area stresses that all brand inspection programs have one commonality: "These groups interact frequently with the very producers affected by NAIS and help shape the program in a way that makes sense for all producers."

Knight explains that USDA's assignment to the working group is to identify opportunities whereby the 15 existing state animal brand programs might complement NAIS. As such, the working group will review the amount of information currently associated with brand inspection programs and determine how that information, if needed, might best be available to state and federal animal health officials.

The working group is also charged with investigating current methods state brand programs use to collect and distribute information. "This charge," Knight states, "is to avoid duplication with NAIS and to make

each effort more efficient for producers."

Co-chairs of the new working group are Sam Wilson, New Mexico Livestock Board Supervisory Inspector; John Picanso, Chief Information Officer, Colorado Department of Agriculture and Dr. John Maulsby, Colorado State Veterinarian.

"As brand inspectors, our job is to protect the livestock that we work for, and we take that job very seriously," co-chair Wilson states. "I believe this newly formed issues working group can add a lot to NAIS."

Wilson stresses that the Western states—the states where brands are a way of life—have been into animal identification for more than 100 years.

"We know identification and livestock, and we listen to our producers and their concerns," Wilson continues. "Livestock owners who brand have a great tracking mechanism in place when it comes to group ID." ●

NEW NAIS Report Highlights Lessons Learned from 2004 Pilot Projects

"The pilot projects demonstrate that the National Animal Identification System will work well and greatly benefit America's producers. These concrete examples of the system's capabilities, tried and proven in the field, are a critical step forward in our efforts to implement this important program." That's the conclusion drawn by Bruce Knight, undersecretary of USDA's marketing and regulatory programs, regarding the variety of pilot projects conducted throughout 2004 to test technologies and procedures recommended for use with the NAIS. Summaries of each of the 16 pilot projects were published in a recently released final report.

The first 48 pages of the report, published in May, are devoted to information related to 2004 initial pilot projects, with the remaining pages highlighting 2006-2007 field trials and research projects.

The executive summary of the report states that the 2004 projects noted that "projects gave stakeholders hands-on experience using identification technologies and, as a result, delivered practical solutions for their routine use."

What Was Learned

In the end, NAIS officials point out that

highly valuable lessons were learned from the 2004 projects. The following summarizes several of the key lessons learned:

The retention rate of radio frequency identification (RFID) tags is much higher than anticipated. A retention rate of nearly 100 percent was achieved with the button-like RFID eartags.

- Use of group/lot identification can significantly reduce a major barrier for producers to participate in NAIS.
- RFID is not a "plug-and-play" application and must be customized to individual locations - the needs of which vary tremendously. Overall, the majority of projects reported that the RFID/reader technology required careful setup, calibration, modification, and use.
- Proper tag application and placement has a direct and significant impact on the retention and readability of the tags.
- Existing animal health and marketing programs can be an effective, producer-friendly means of collecting data for NAIS. Specific programs such as the national Dairy Herd Improvement Program are already in place that integrate well with NAIS. These programs allow producers to participate in

NAIS with minimal time, effort or added expense on their part.

- The cost-effectiveness of low frequency RFID must be evaluated according to species.
- Workable options are available for producers who want to identify their animal electronically without investing in reader equipment. Producers were able to eliminate the need for expensive equipment by using group/lot visual tags for day-to-day management purposes and then matching the tags with individual RFID tag numbers when animals moved off the premises.
- The use of electronic identification allows for more accurate and efficient recordkeeping. Projects' participants reported that using RFID technology significantly reduced data entry errors, enhanced business practices and decreased labor costs.
- Calves can be tagged successfully with RFID devices at a very young age.

The full report is available at www.nais.gov. Once at the site, simply click on "NAIS Pilot Projects/Field Trials Summary" under the "What's New" section at the far right side. ●

Dollar Figure Put to Pharmaceutical Technologies Impact On Beef Industry

Iowa State University economists estimate that pharmaceutical technologies such as parasite control products, growth implants, sub-therapeutic antibiotics, ionophores and beta-agonists have a significant impact on the U.S. beef industry. The direct cost savings to producers is estimated at \$365/head over the lifetime of an animal.

These findings emerged during an "Economic Analysis of Pharmaceutical Technologies in Modern Beef Production" study conducted by Dr. John Lawrence and Maro Ibarburu, both with Iowa State.

The economic analysis used 2005 cattle prices and production input costs and combined performance data from more than 170 university studies conducted over the past 20-25 years. The performance results were converted to their dollar impact using budget data from 10 universities in various regions of the United States.

Researchers reported that selling prices would need to jump by 36 percent to cover the increase in costs if these pharmaceutical technologies did not exist. Other conclusions drawn by the researchers if the tech-

nologies were not in place included a 14 percent smaller calf crop on the same number of cows; an 18 percent reduction in total beef produced as steer/heifer slaughter would be reduced by 16.5 percent; a 181 percent increase in net beef imports to make up for the domestic production shortfall; a 13.5 percent increase in retail beef prices; and an 8.5 percent decline in retail beef consumption.

Research statistics cited in the Lawrence-Ibarburu report include:

- Nearly 73% of cow-calf operations deworm cattle (Calf Health and Productivity Audit, 1997)
- 84% of cows received some injections in 1996 (Calf Health and Productivity Audit, 1997)
- Individual trials show the effect of dewormers on pregnancy rate ranged from an increase of 2.4% (Purvis et al., 1994) to 120 percent (Larson et al., 1992)
- Dewormer's effect on the weaning weight ranged from an increase of nearly 0.3% (Stroh et al., 1999) to more

than 13% (Stromberg et al. 1997)

- 81% of cow-calf operations used some form of fly control (Calf Health and Productivity Audit, 1997)
- Individual trials measuring the effect of fly control on calves' average daily gain ranged from an increase of 0.3% (Quisenberry and Strohbehn, 1984) to 21% (Lynch et al., 1982)
- Some type of dewormer was used in more than 99% of feedlots (Health Management and Biosecurity in U.S. Feedlots, 1999)
- 99% of feedlots also regularly use some method of fly control in feedlots (Health Management and Biosecurity in U.S. Feedlots, 1999)

The paper is available in full at www.beeftechnologoes.com/pdfs/1869_getitpr_econoft.pdf and was funded by a grant from the Growth Enhancement Technology Information Taskforce, an organization of animal health company executives committed to providing educational materials to the beef industry and beef consumers. ●

NIAA Conventioneers Hear Four Unique Perspectives on Biofuels and Animal Agriculture at the 'Crossroads'

Ethanol and biodiesel, hot topics in rural coffee shops across the nation, were the focus of the Opening General Session of the National Institute for Animal Agriculture's annual meeting in Sacramento, April 2-5, as four speakers presented their unique perspectives on "Biofuels Energy: Animal Agriculture at the Crossroads."

A California farmer, livestock producer, former politician and cofounder of that state's largest ethanol producing company, Bill Jones, opened the session with "Corn, Cattle and Carbon Credits—A California Perspective" with a positive assessment on the relationship between biofuels and livestock production. Jones' company is Pacific Ethanol, Inc.

Meanwhile, Midwest economist with special emphasis on the swine industry, Dr. Steve Meyer, Paragon Economics, Inc., predicted that biofuels would negatively affect livestock producers over the next few years, "especially for pork and poultry producers who are less able to use the ethanol coproduct, DDGS (dried distillers grain with solubles).

Dr. Gavin Meerdink, Professor Emeritus for the University of Illinois College of Veterinary Medicine and now a nutrition consultant, cattle feeder and grain farmer, talked about the use of ethanol and biodiesel co-products and the effect of their nutritional composition on livestock health.

Finally, David Kaluzny, II, president of the National Renderers Association and vice president of Kaluzny Brothers, talked about his industry's perspective of biofuels in general and in particular as the role of rendered animal fats and oils (glycerin) used in biodiesel.

All of the speakers agreed that demand for ethanol, whether it's created by federal and state government policies, the high cost of oil or both, would keep the price of corn at its current price or higher for at least the next two years or until production can catch up with demand. Dr. Meyer observed that the high cost of corn is politically driven by federal and state energy policies rather than market forces. "So as long as the price of oil stays high and our energy policies remain in effect, the price of corn is likely to remain high," he said.

Further, Dr. Meyer predicted that ethanol might very likely be an "event" in agriculture equal to the introduction of soybeans as a U.S. crop or even the wide-

spread adoption of the tractor.

As with many things, California has its own unique situation that is atypical of the rest of the country when it comes to ethanol. Due to the heavy concentration of dairy cattle, the ever-present issues relating to water availability and use and state environmental air quality policies which created carbon credits, ethanol works well in all respects in California. "Yes, the cost of corn is high," concedes Jones, "but the value of wet distillers grain as dairy feed helps offset that expense. And, price signals sent to the American corn farmer will quickly encourage significant corn production."

In fact, Jones predicts that California farmers may become significant corn producers, "and not just for silage."

The use of the coproducts, distillers grains—wet and dried, was discussed by each presenter from their varying perspectives. All agree, to date, that inconsistency in the nutritional content of these products is a problem for livestock and poultry producers. However, with the demand for these products rising, ethanol producers will eventually find ways to make their coproducts more reliable and easier to use.

Dr. Meerdink warned that cattle producers in particular will need to be aware of health issues resulting from distillers grains. For example, they can cause calcium and phosphorus imbalance to the point where cattle develop kidney stones. High sulfur levels can cause several prob-

lems including polioencephalomalacia (which is *not* the polio virus humans can contract, but rather a condition in which the cow's brain is damaged.) Another is copper deficiencies because sulfur & copper readily combine rendering the copper unavailable to the animal.

In addition to the difference in nutrient levels between whole corn and DDGS products, "what's in the grain comes with the DDGS," Dr. Meerdink explained. This includes mycotoxins such as aflatoxin, ochratoxin and fumonisins, and antimicrobial agents such as virginiamycin.

Fumonisin is particularly dangerous in the equine diet.

"One-third—or 11.5 billion pounds—of all the fats and oils produced in the U.S. come from rendered livestock products. The other two-thirds come mainly from soybeans, but also from other grains such as corn and canola." Mr. Kaluzny pointed out. "We have a surplus of these feedstocks which are used to make biodiesel, from whichever source."

PowerPoint presentations from Drs. Meyer and Meerdink and Mr. Kaluzny are available at NIAA website, www.animalagriculture.org, under the NIAA News tab, click on the second "Zimmcomm" Release. You can view their presentations and hear recorded interviews of each of the four speakers. You can also see their presentations on the 2007 Annual Meeting proceedings tab. ●

'Controlled Risk Country' for BSE

The United States has been officially classified as a controlled risk country for bovine spongiform encephalopathy (BSE). That's the word Secretary of Agriculture Mike Johanns received in mid-May from the World Organization for Animal Health (OIE).

Secretary Johanns said USDA's Animal and Plant Health Inspection Service (APHIS) submitted an application and supporting documents to OIE in October 2006 for review and formal classification for BSE risk.



Mike Johanns
Secretary of Agriculture

"The controlled risk status classification we have received provides strong support from an internationally recognized, standard-setting body that the science-based mitigation measures in place in the United States effectively protect animal health and food safety," Secretary Johanns states.

He added that this international validation will be used to urge U.S. trading partners to reopen export markets to the full spectrum of U.S. cattle and beef products. ●

Shortage of Food Animal Veterinarians: A Call to Action

A year ago the Spring/Summer 2006 Cattle Health Report featured the article "Projected Serious Food Supply Veterinarian Shortage Poses Threat to Industry, Society," that provided an overview of the Food Supply Veterinary Medicine Coalition Report conducted by Kansas State University's College of Business Administration on behalf of various veterinarian organizations. The article noted that, while America's livestock and meat industries have one of the world's best health and safety records, this status "may be threatened in the years ahead because of a projected severe shortage of food animal veterinarians."

Research findings were also published in three articles in the June 1, June 15 and July 1, 2006 issues of the Journal of American Veterinary Medical Association (JAVMA).

Mainstream media, including the Associated Press Wire, New York Times and the Brownfield Network, picked up the information and relayed it to the American public at the time. This spring, the story of the shortage of food animal veterinarians came alive again with a second round of mainstream media in the United States and outside the country.

A headline in the International Herald Tribune read, "Health experts in U.S. say shortage of farm animal veterinarians could lead to disease outbreaks." The first two sentences of the article expanded on the headline: "Public health experts are concerned that a shortage of farm animal veterinarians in the U.S. could lead to disease outbreaks, potentially endangering human health and threatening the nation's food supply. The American Veterinary Medical Association estimates the shortage at a relatively small 4 percent. But health officials say even the small gap increases the potential for diseases to go undetected."

In the same article, Dr. Lyle Vogel, director of the animal welfare division at the AVMA, was quoted, "It's not like the other 96 percent can pick up the slack. Because of the distances and workload of the remaining veterinarians, they just can't fill in that shortage."

Likewise, Robin Schoen, director of the Board on Agriculture and Natural Resources at the National Academy of Sciences, noted that, "We're kind of weakening the whole system. The veterinarian is the front line."

More to Tell

Why is the U.S. media returning to the food animal veterinarian shortage?

"The reason for the second round of media attention is that the problem has not been solved," Dr. Vogel states. "The shortage still exists, and we believe state and federal legislatures should take action to help solve this shortage."

Dr. Vogel says one desired action is for Congress to appropriate money for debt forgiveness or loan repayment for new veterinarians who set up practices or work in the under-served rural areas. He points out that the National Veterinary Medical Service Act was passed in January 2004 but the dollar amount available is extremely low: \$500,000 in 2006 and 2007.

"This is simply not adequate assistance to make that program meaningful," Dr. Vogel elaborates.

According to a 2006 survey, the mean starting salary for veterinary graduates was \$45,546. The mean loan debt for the same graduates was \$105,805. Loan payments on that amount of debt is more than \$1,000/month, requiring average veterinary graduates to spend up to one-third of their monthly salaries on educational debt. The National Veterinary Medical Service Act authorizes the Secretary of Agriculture to establish a loan repayment program for veterinarians who agree to serve in areas of need, including government service. Yes, agencies such as the Animal and Plant Health Inspection Service and Food Safety and Inspection Service in the USDA also have experienced difficulty recruiting veterinarians to satisfy staffing needs.

In exchange for additional debt repayment, eligible students could enter into additional agreements with the Secretary to assist the USDA in addressing disease outbreaks, bioterrorist threats or similar emergency situations.

Another reason cited by Dr. Vogel for keeping the shortage of food animal veterinarians "alive" in the mainstream media is to get the public support of federal legislation regarding The Veterinary Public Health Workforce Expansion Act (VPHWEA).

The Association of American Veterinary Medical Colleges has been working very closely with the staffs of Senator Wayne Allard (R-CO) and Congresswoman Tammy Baldwin (D-WI) concerning the introduction of a veterinary workforce expansion in the 110th Congress. Their bill is similar to the Veterinary Workforce Expansion Act of the last Congress, with a few improved changes that the AAVMC has requested.

This legislation establishes a competitive grant program through the United States Department of Health and Human Services to build capacity in veterinary med-

ical education and expand the workforce of veterinarians.

"We urge people to get involved and call their Congressmen and state legislators," Dr. Vogel states. "Your calls can have an impact and help spur the government into action."

Smith-Kilborne Program

In response to the food animal veterinarian shortage, USDA/APHIS resurrected the Smith-Kilborne Program. The program acquaints chosen veterinary students with various foreign animal diseases which potentially threaten our domestic animal population. Upon completion of the course, participating students are asked to share their new knowledge with others at their respective veterinary school.

The week-long program admits one student from each of the nation's 28 veterinary schools, with the USDA paying for each student's program-related expenses.

Smith-Kilborne Program classroom sessions were conducted at Cornell University in Ithaca, N.Y., with presentations and laboratory sessions conducted at the Plum Island Animal Disease Center, Plum Island, N.Y.

"This program is one-of-a-kind and covers topics in greater detail and scope than the students would get in their university programs," states Jason Baldwin, DVM, staff veterinarian, Professional Development Staff of USDA/APHIS/VS.

"The Plum Island sessions are invaluable, as Plum Island is the only place in the country where these students will see diseases such as foot-and-mouth disease and Newcastle disease. Acquainting the students with the symptoms of diseases such as this is important because, once the students enter practice, they will be our first line of defense."

New 18-Month Study

April 19 marked the first meeting of a National Academy of Sciences expert committee formed to study the broad scope of issues related to the veterinary workforce in the United States. The study, Assessing the Current and Future Workforce Needs in Veterinary Medicine, will explore historical changes in the size and characteristics of the veterinary workforce, assess the demographics and adequacy of the current supply of veterinarians in different occupational categories and sectors of the economy and identify incentives, disincentives and other factors that could affect the numbers of veterinarians seeking jobs in different sectors in the future. ●

News Briefs News Briefs News Briefs News Briefs News Briefs

Dr. Ron DeHaven Named Executive Vice President of AVMA

Dr. Ron DeHaven has been named executive vice president of the American Veterinary Medical Association, succeeding Dr. Bruce Little who retired. Dr. DeHaven steps into the position after having served as the USDA's top animal health official. He began his career with APHIS in 1979, then was named to lead APHIS in April 2004. Although Dr. DeHaven accepted the AVMA position in late March, he



Dr. Ron DeHaven

remained at APHIS for a few months to attend the 75th General Conference of the World Organization for Animal Health, May 20-25, in his governmental role and to complete several projects.

Smith Takes New Role at USDA/APHIS

Cindy Smith has been appointed the USDA's Animal and Plant Health Inspection Service's new associate administrator. In her new role, Smith will assist in managing one of USDA's most multifaceted agencies, charged with defending America's animal and plant resources from agricultural pests and diseases. In making the announcement, Dr. Ron DeHaven, administrator for USDA/APHIS, acknowledged Smith's 28-year career at APHIS and her commitment to "public service, vast knowledge of agency activi-

ties and dedication to protecting American agriculture."

Ivy Animal Health at Eli Lilly

Ivy Animal Health, Inc. will become an operating unit of Eli Lilly and Company's Elanco Animal Health division under an acquisition agreement announced May 25 by Lilly. The transaction is expected to close near the end of the second quarter of 2007, contingent upon regulatory approval. Privately held Ivy was established in 1982 and includes four divisions—Ivy Laboratories, VetLife, Ivy Natural Solutions and AgSpan—and will continue to operate from its current location in Overland Park, Kan. Upon deal closing, Ivy will become a wholly owned subsidiary of Lilly. ●

Another Step Toward NAIS Success

A key ingredient in the success of the National Animal Identification System (NAIS) can be found in its partnerships. These alliances include state and federal officials working side by side with industry and producers to create an effective and efficient animal disease traceability program. USDA has recently taken steps to create new relationships that will further support the implementation of the NAIS through a series of outreach meetings with representatives from Historically Black Colleges and Universities (HBCU's), also known as 1890 Land Grant Institutions, and community-based organizations that serve minority and economically disadvantaged producers.

More than 100 representatives from

the 1890 institutions, community-based organizations and state agricultural representatives met with USDA officials at a May 16-18 conference on the Virginia State University campus in Petersburg, where they learned more about NAIS and worked to develop and implement NAIS outreach strategies tailored to the needs of minority producers and communities.

"NAIS works best when it is actively shaped by those who participate in the program," stated Bruce Knight, undersecretary for USDA's marketing and regulatory programs mission area.

Dr. Alma Hobbs, Dean of the VSU School of Agriculture, agreed with Knight. "As you begin to work together and forge partnerships, that is the real success," Dr.

Hobbs stated. "We are here to support that effort."

Dr. John Clifford, deputy administrator of the USDA/APHIS, underscored the importance of NAIS reaching out to involve groups such as the HBCU's.

"We are here to protect American agriculture," Dr. Clifford stated. He said the purpose of the meeting was "building trust".

This was the first of several meetings that USDA will conduct to provide NAIS education and outreach to representatives of minority groups. Another outreach event is planned later this year to provide information to Native American groups and Hispanic Serving Institutions. ●

FFA to Assist with NAIS Implementations

The U.S. Department of Agriculture has entered into a cooperative agreement with the National FFA Organization to advance the implementation of the National Animal Identification System (NAIS). FFA will use the cooperative agreement funds to develop and provide NAIS education programs for their current and alumni members as well as promote premises registration across the country.

The National FFA Organization stepped up to the plate with a proposal after the USDA announced in February

that up to \$6 million was available for cooperative agreements to promote NAIS and increase participation in premises registration.

"The youth involved in the National FFA Organization are the future of agriculture in the United States," said Bruce Knight, undersecretary for USDA's marketing and regulatory programs. "By ensuring the success of NAIS, we are ensuring their future as farmers."

Dr. Larry D. Case, FFA chief executive officer and national FFA advisor, was

equally as enthusiastic about the agreement.

"Together we can combine our talents and resources to educate the agriculture industry about NAIS and to help premises registration," Dr. Case stated.

The National FFA Organization, formerly known as the Future Farmers of America, has 495,046 student members that are part of 7,242 local FFA chapters in all 50 states, Puerto Rico and the Virgin Islands. ●

Search Narrowing for National Bio-Defense, Agro-Defense Facility

A dozen states submitted bids for a proposed 520,000-square-foot National Bio- and Agro-Defense Facility (NBAF) that would replace an aging, smaller lab at Plum Island, N.Y. Although the winning state will not be announced until October, 2008, Department of Homeland Security officials narrowed down their options in July to five sites: Flora Industrial Park, Madison County, Mass; Kansas State University, Manhattan, Kan.; Texas Research Farm, San Antonio, Texas; Umstead Research Farm, Granville County, N.C.; and University of Georgia/South Milledge Ave., Athens, Ga.

States submitting bids included Texas, with four sites; Georgia, Kansas and Mississippi, each offering two sites; and California, Oklahoma, Maryland, Missouri, North Carolina and Wisconsin with one site each. Kentucky and Tennessee worked together for one site in Kentucky.

Although states' written bids were not made public, states were required to make available at least 30 acres of land.

The narrowing process included visits by federal officials to the 17 potential sites.

The government reports that it considered several factors before making its decisions.

The main factors are site proximity to research and research capabilities, acquisition/construction/operations, and community acceptance. The DHS preferences include in-kind contributions such as offers of roads, cheap water supplies and discounted utilities.

The goal is to have the facility built and the lab operational by 2014.

Disease Priorities

Dr. John Vitko, Director of the Homeland Security Department's Chemical and Biological Division in its Science and Technology directorate, said the NBAF will provide modern, safe, secure, state-of-the-art biocontaminant facilities to study and develop countermeasures for foreign animal and zoonotic disease. Zoonotic diseases of interest include foot-and-mouth disease, classical swine fever, African swine fever, Rift Valley Fever and Nipah and Hendra Viruses.

The new laboratory will also have BSL-3

space which will contain the organisms in the facility and BSL-4 space which will provide additional protection for the researcher against agents which can infect humans. It will be the only laboratory in the country that will have BSL-4 space designed to accommodate large animals so high consequence zoonotic agents that infect both large animals and humans can be studied.

The Homeland Security Department facility is estimated to cost at least \$450 million to build and promises at least 300 lab-related jobs. ●

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