

Swine HEALTH REPORT

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NAHMS Study Highlights Veterinarian's Role For Pork Quality Assurance

The USDA's National Animal Health Monitoring System (NAHMS) recently released an information sheet detailing the role of the veterinarian in helping U.S. operations provide quality pork. The information was compiled from data collected during the NAHMS Swine 2000 study.

The study found that 76% of the nation's pork producers indicated that a veterinarian is either a "very important" or "moderately important" source of information on food safety in pork production. As indicated in the chart, veterinary services were more likely to be used for training or quality assurance as operation size increased.

The results are based on sites that had at least one veterinarian

visit during the previous 12 months.

The National Pork Board's Pork Quality Assurance (PQA) Program emphasizes good management practices in the handling and use of animal health products, leading to a higher quality, safe pork product free of violative drug residues.

"I think more and more veterinarians are moving to provide services related to food safety," said Dr. Eric Bush, swine commodity specialist with the USDA-APHIS-VS Center for Animal Health Monitoring.

"They are expanding beyond the basic educational points of PQA."

The Swine 2000 study collected data on swine health and management practices from a stratified random sample of swine production sites in 17 states. These sites represented 94% of the U.S. pig inventory and 92% of U.S. pork producers with 100 or more pigs.

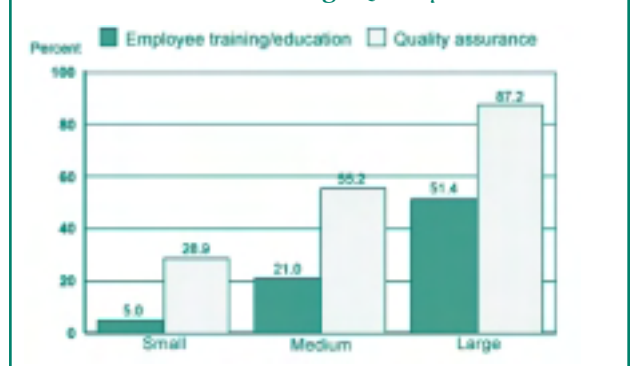
Overall, 2,499 swine production sites participated in the first interview from June 1, 2000, through July 14, 2000. For estimates in the report, small, medium and large sites refer to sites with less than 2,000, 2,000 to 9,999, and 10,000 or more pigs in total inventory.

The PQA program began in 1989 to encourage producers to review their herd health programs and consider good production practices. The advantages to the pork producer include decreased production costs, avoidance of drug residues and an

increased awareness of food safety concerns.

The Swine 2000 survey indicated that 68.1% of all sites kept records on drug usage. Many more large sites (98.6%) and medium sites (89.3%) kept records on drug usage than small sites (63.6%). For large sites that used antibiotics to treat disease conditions in grower/finisher pigs, about three-quarters recorded

Percent of Swine Production Sites Using a Veterinarian For Training, Quality Assurance



drug names, treatment dates, and doses. Pen ID was recorded more often than individual animal ID following the use of antibiotics in grower/finisher pigs, regardless of site size.

Two other information sheets based on the study also have been released. These deal with trends in vaccination for respiratory disease and biosecurity/health management on U.S. swine operations.

For more information on these or other NAHMS reports, visit the USDA's Veterinary Services Web site by clicking on:

www.aphis.usda.gov/vs/ceah/cahm

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Long-time national PRV eradication program coordinator succumbs to pulmonary fibrosis



Arnold C. Taft, D.V.M., 74, of Bowie Md., passed away on Dec. 30, 2002, at the Univ. of Maryland Medical Center in Baltimore after a coura-

geous battle with pulmonary fibrosis.

A graduate of the Univ. of Illinois College of Veterinary Medicine in 1957, Dr. Taft operated a mixed animal practice in Olney, Ill. for 30 years. In 1986, he accepted a position with the Office of the State Veterinarian in Springfield, where he implemented Illinois' pseudorabies eradication program, which served as a national model.

In 1991, Dr. Taft accepted a position as senior staff veterinarian for swine programs with USDA's Animal and Plant Health Inspection Service in Riverdale,

Md., and remained in that position until his death. On Jan. 14, 2002, he witnessed the national eradication effort reach a historic milestone when the number of PRV cases in the U.S. reached zero.

Taft was a veteran of the Korean War. He is survived by his wife, Patricia, two children and four grandchildren.

Memorials may be made in the name of Arnold C. Taft to the American Lung Association (Research for Pulmonary Fibrosis), 14435 Cherry Lane Court, Suite 410, Laurel, Md. 20707-4959.



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Hentges Selected to Head USDA's Nutrition Policy and Promotion Center

Agriculture Undersecretary Eric Bost has announced the appointment of Dr. Eric Hentges as director of the U.S. Department of Agriculture's Center for Nutrition Policy and Promotion (CNPP).

In this position, Hentges will oversee the development of nutrition guidance in the Department of Agriculture in collaboration with the U.S. Department of Health and Human Services.

"Dr. Hentges brings a wealth of knowledge in nutrition education and nutrition research to USDA," said Bost. "He is a valuable addition to the USDA team."

As a respected research scientist in human nutrition, Hentges joins USDA with more than 20 years of experience. Before joining USDA, Hentges was vice president of Applied Technology and Education Services for the National Pork

Board, where he administered competitive research grant programs and directed the human nutrition research program.

Previously, Hentges was director of Consumer Nutrition and Health Research with the National Pork Producers Council. From 1987 to 1995, he was director of Human Nutrition Research with the National Livestock and Meat Board.

At the University of Georgia in the mid-1980s, he held a post-doctoral research associate position in conjunction with the Food and Nutrition Department and the Richard Russell Agricultural Research Center, funded by the USDA's Agricultural Research Service.

Hentges holds a doctorate degree in animal nutrition from Iowa State University.

Budget Boost

President Calls for \$42 Million Increase for Food Safety

President Bush will seek record-level support for USDA's meat and poultry food safety programs as well as increase efforts to strengthen agricultural protection systems in his FY-2004 budget. That's according to Agriculture Secretary Ann M. Veneman, who announced recently that USDA's food safety budget will increase to \$797 million, an increase of \$42 million over the FY-2003 request.

This represents a \$148 million (or 20%) increase in food safety programs since FY-2000. The FY 2004 request will fund 7,680 food safety inspectors, provide specialized training for the inspection workforce, increase microbiological testing and sampling, strengthen foreign surveillance programs and increase public education efforts.

In addition, USDA's budget will also include \$70 million in new funding through other USDA programs to strengthen agricultural protection systems, that would include increased laboratory security measures; biosecurity, animal disease and vaccine research; and additional animal and plant pests and disease monitoring programs.

"The President cares deeply about ensuring a strong food safety system and the protection of agriculture against potential threats," said Veneman. "This additional funding continues to build upon a strong record of achievement in further strengthening our protection systems to ensure the integrity of our food systems."

The Secretary outlined the following details that will be contained in USDA's FY-2004 budget for food safety and agricultural protection systems. More details were expected in early February, when the Bush Administration was to release its formal budget proposals.

Highlights include:

- A \$42 million increase to provide record-level funding for USDA's Food Safety and Inspection Service (FSIS). These additional resources will support FSIS food safety activities, including increasing its inspection workforce to 7,680 meat, poultry and egg products inspectors and veterinarians; providing specialized training for food safety authorities to ensure safety of the commercial supply of meat, poultry and egg products; increasing microbiological testing to ensure effective controls or elimination of pathogens in products; increasing foreign product surveillance; and new food safety public education efforts.

- A \$23 million increase for Animal and Plant Health Inspection Service programs for inspections at ports of entry; increase availability of foot-and-mouth disease vaccines; and expansion of diagnostic and other scientific and technical services.

- A \$47 million increase for USDA's various research agencies for strengthening laboratory security measures; conducting additional research on emerging animal diseases; new vaccine development; new biosecurity database systems; and continued development of the unified Federal-State Diagnostic Network for identifying and responding to high-risk biological pathogens.

Secretary Veneman made the announcement during remarks at the U.S. Poultry and Egg Association International Poultry Exposition in Atlanta. The Secretary toured exhibits highlighting new food safety research and technologies. She also conducted a roundtable discussion with local farmers to discuss food safety, homeland security and other farm issues.

APHIS Signs Agreement for New Electronic Health Certificates

USDA's Animal and Plant Health Inspection Service, Veterinary Services (APHIS-VS) has announced that it has established an agreement with Communications Resources Inc. to implement GlobalVetLink web-based technology for private practitioners to create certificates of veterinary inspection (health certificates) for movement of animals between states.

The application has already been used in Florida and can be easily modified for use by the other 49 states. The electronic health certificates will be web-based and incorporate the requirements endorsed by the United States Animal Health Association five years ago.

The system allows veterinarians to create certificates for printing, allows all states to access domestic import/export information, and produces a standard data dump that each state could use to populate its own local data systems.

APHIS-VS is targeting implementation to begin during the first quarter of 2003 for food animal species.

Electronic health certificates have been successfully applied in Florida with benefits realized by practitioners, the state veterinarian's office and Veterinary Services. APHIS-VS will build on that success by identifying four or five additional states to further pilot the current application.

"Real time data entry and retrieval of information for animal movement is of increasing importance," said Kevin Maher, GlobalVetLink president. "Our dream of a national, centralized web-based system is actualized with this important APHIS-VS relationship."

'A Plan We Can Build From'

USAHA Accepts Task Force's National Food Animal Identification Work Plan

A national animal identification work plan, developed by a task force representing more than 30 livestock organizations, was accepted through a unanimous resolution at the meeting of the U.S. Animal Health Association (USAHA) Committee on Livestock Identification Oct. 23 in St. Louis.

This support by USAHA is a positive step toward the establishment of a national identification program and system for U.S. animal agriculture, according to Neil Hammerschmidt, chair of the National Food Animal Identification Task Force. "For the first time, we have a work plan that we can build from. The resolution requesting the USDA Animal and Plant Health Inspection Service (APHIS) to use the work plan as a guide for the development of a national program is significant because several species groups brought it forward as a united industry on this issue," he said.

The task force, coordinated by the National Institute for Animal Agriculture (NIAA), spent the past six months developing the "National Identification Work Plan." More than 100 representatives of animal agriculture served on the task force and contributed to its five working groups: animal disease management, marketability, standards, producer concerns and funding, authority and oversight.

The task force mission is to ensure the United States has an adequate animal identification system that supports the financial viability of animal agriculture. It believes that an animal identification system is needed to maintain the health and biosecurity of the U.S. herd.

The USAHA resolution also called for the establishment of a joint federal and state government, USAHA and industry animal identification development team by January of

2003. This team is to use the plan as a guide to develop an ID system that will enhance animal disease monitoring, surveillance, control and eradication in the United States.

John Wortman, chair of the USAHA Livestock Identification Committee, said industry groups are ready to work more closely with



Neil Hammerschmidt, chair, National Food Animal ID Task Force, unveils the work plan at the 2002 USAHA meeting.

the USDA Animal and Plant Health Inspection Service (APHIS) and state animal health officials to refine the animal identification systems necessary to maintain animal disease programs in the United States. USAHA is a national non-profit organization working with state and federal animal health officials, veterinarians, livestock producers, national livestock and poultry, and research scientists to control livestock diseases.

The ID task force determined that 48-hour traceback capability is the ultimate goal of a national ID system, especially in the event of a foreign animal disease outbreak in the United States. It concludes that a national ID system should have the

capability to identify all premises (livestock operations, feedyards, markets or other stops in the food production chain) that had direct contact with a disease within two days after discovery. It recommends that movement of individual animals or units of animals be recorded into a central database, or a seamlessly linked database infrastructure.

The ID task force recommends the integration of radio frequency identification (RFID) technology as the most feasible means to achieve a 48-hour traceback system.

The National Identification Work Plan outlines a phase-in program. Phase I, for example, would implement a National Premises System. Phase II would implement individual ID, where animals would have an official tag with a unique visual animal identification number, and later progressing towards RFID. A group or lot ID number would be used for market swine identification. In phase III, a system to report animal movements would be implemented.

Industry organizations and other stakeholders will have an opportunity to review and comment on the National Identification Work Plan through March 2003. "This allows livestock organizations time to review the plan at their respective conventions, board and committee meetings and gather producer feedback," Hammerschmidt said.

Editor's note: To request a copy of the 34-page National Identification Work Plan, contact the National Institute for Animal Agriculture at (270) 782-9798, or review it on the NIAA Web site at www.animalagriculture.org/ID.

For additional information on the National Food Animal Identification Task Force contact: Neil Hammerschmidt at office phone (608) 848-5237; or e-mail: nhammerschmidt@wiid.com.

Antibiotic Alternatives

Study Shows Promise For Probiotic Approach

Food Safety Consortium researchers at Iowa State University have found that feeding pigs yogurt cultures fermented with *Lactobacillus* can lead to a significant reduction in *Salmonella* levels.

"There's a huge level of concern worldwide on the use of low-level antibiotics in animal feeds," said Dr. D.L. (Hank) Harris, an Iowa State microbiology professor and consortium researcher. "The obvious concern is that the use of those antibiotics may generate organisms that are resistant to them and those same organisms would find their way into the human population and cause disease in humans that would not be treatable."

Dr. Harris' research group looked into the use of *Lactobacillus*. The initial results were encouraging, but not consistent. Not all swine tested experienced a reduction in *Salmonella*. More experiments with additional organisms are planned.

The inconsistent results mean that although the yogurt cultures are capable of reducing the pathogen levels, it is premature to use the procedure in swine production pending further research. But

Dr. Harris is looking ahead to possibilities, particularly with regard to small-scale swine producers.

As the livestock industry consolidates, opportunities increase for organic pork producers. "Those producers definitely need probiotic products because they want to avoid antibiotics entirely as part of the natural food trend," Dr. Harris said. "So there is going to be quite an opportunity of demand to supply them with compounds of substances that are natural. The idea of using simple milk cultures was trying to address the need of that particular growing industry, thinking the farmer himself could do this."

Farmers running small organic operations could grow the *Lactobacilli* overnight in milk cultures and feed it to the pigs the next day, a process that wouldn't be practical for a farm with thousands of pigs, Dr. Harris noted.

As the research is further developed, the possibility remains that the natural approach could still be made applicable to larger pork producers. Dr. Harris said the use of yogurt cultures would likely remain a specific application for small

organic producers.

"But it could lead to products where it could be administered to large operations, be it through feed or via water systems," he said. "You might be able to modify this model to a format so it would be marketable." For example, a large company might want to adopt the process so it could figure out how to convert it to large-scale situations.

Another Iowa State University researcher, Dr. Dermot Hayes, has studied the economics of a ban on feed-grade antibiotics in Sweden and Denmark. He noted that, as the use of growth-promoting antibiotics declined in Denmark, the use of therapeutic drugs increased. And he pointed out that many of the therapeutic drugs also are used in treating human disease.

He pegged the cost of banning feed-grade antibiotics at \$6/pig in Sweden and \$4.50/pig in Denmark.

University of Illinois researcher Dr. Gay Miller found that economic benefits of using antibiotics represented about 9% of the net return realized by Illinois pig finishing operations in 2000.

EPA Issues New CAFO rule

The U.S. Environmental Protection Agency (EPA) has issued a new Concentrated Animal Feeding Operation (CAFO) rule that will result in additional environmental protection requirements for U.S. animal agriculture. These additional requirements include enhanced manure handling, nutrient management planning and increased record keeping.

Representatives of animal agricul-

ture acknowledged the importance of the new regulations, but point out the new rules will result in additional costs.

The new CAFO rule "will add significant compliance costs, new responsibilities, and additional public oversight and legal risks to pork production," said National Pork Producers Council President Dave Roper, a pork producer from Kimberly, Idaho. "The rule will present many challenges to pork producers over the next 15 to 20 years."

The rulemaking caps a long process that began more than two

and a half years ago, when EPA began developing uniform CAFO standards for all states to follow in regulating livestock and poultry production. States are required to upgrade existing regulatory programs to meet these tough new standards.

Dr. David Meeker, vice president of scientific and regulatory affairs for the National Turkey Federation, said the rules will impose "substantial regulatory burdens" on the turkey industry. "Mostly composed of dry-litter farms, the turkey industry does not pose a significant enough environmental risk to justify this level of regulation," he said.

Iowa Modifies PRV Testing Plan

Iowa Secretary of Agriculture Patty Judge has announced that the Iowa Department of Agriculture and Land Stewardship is implementing new rules for the Pseudorabies Eradication Program.

The rules were implemented because the federal funding for enhanced surveillance testing in Iowa was discontinued at the end of December. Available federal and state funding is insufficient to maintain the previous testing levels.

"These new rules will change the pseudorabies testing and will recognize the official monitoring test as current for a period of 12 months, as opposed to the current six months. This will result in fewer tests and a significant cost savings to Iowa's pork producers, while at the same time ensuring that we are doing everything we can to keep the pseudorabies case number at zero in Iowa," Judge said.

Pseudorabies eradication efforts in Iowa began in 1989 in the known infected counties, and grew into a statewide program by 1993. Iowa has no known current pseudorabies cases.

Dr. John Schiltz, Iowa's state veterinarian, cautioned producers to continue their vigilance toward eradicating the disease. "Winter is the time of year when we historically had trouble with a rise in pseudorabies cases in Iowa," he said. "Even though we have no known cases at this time, this is not the time to let up on our surveillance and vaccination. Producers and veterinarians should remain vigilant and still consider pseudorabies when swine are showing symptoms of the disease."

Veterinarians have been made aware of the new rules through the Iowa Department of Agriculture's Rapid Veterinary Information

Network (IRVIN.) This rapid communications network assists the state veterinarian's office in communicating with veterinarians. The IRVIN list consists of nearly 1,000 veterinarians across Iowa.

The new rules do not change the testing requirement on sales and the vaccination program will stay in place with federal money available for the vaccines through the end of March 2003.

Dr. Schiltz explained that the emergency rule changes the expiration date of the monitored status of the site from six months from the date of last official bleeding to 12 months, for the purpose of relocating (no change of ownership) swine. "We are very grateful for the federal funding which was made available," Dr. Schiltz added. "It was instrumental in Iowa in helping us make progress in the eradication effort."

Pork Industry Questions Cost of COOL

An economic analysis of mandatory country-of-origin labeling (COOL) concludes it will be very costly for the U.S. pork industry. That's according to the study conducted by Dermot Hayes, an economist at Iowa State University and Steve Meyer, a U.S. pork industry economist.

These researchers examined the potential impacts of country-of-origin labeling on several levels of the industry. According to Hayes and Meyer, the estimated costs for pork producers of implementing a full traceback system associated with country-of-origin labeling will be \$10.22 per hog or \$4.00 per hundred pounds. This is equivalent to a 10% increase in the costs of on-farm production or approximately \$1.02 bil-

lion for the U.S. pork industry. In addition, assuming the 10% increase in costs is passed on to the retail level, U.S. consumers will likely demand seven percent less pork due to higher prices, Dr. Meyer said.

The net effect on U.S. pork exports could be equally dramatic. According to Hayes and Meyer, by year 2010, U.S. pork exports could be 50 percent lower than they would be without the labeling program. This is because Canada, which supplied 5.7 million hogs and pigs last year to the U.S., would be forced to process these hogs in Canada.

An additional area of concern for pork producers is the burden of recordkeeping and audits for coun-

try-of-origin labeling.

Jon Caspers, an Iowa pork producer and president of the National Pork Producers Council, said the study makes it clear that country-of-origin labeling would be detrimental to pork producers. "We believe that given Hayes' and Meyers' findings, Congress must conduct Congressional hearings on this issue and reevaluate the potential impacts on the U.S. pork industry," he said.

NPPC has long opposed mandatory country-of-origin meat labeling due to additional on-farm costs placed on pork producers.

A copy of the economic analysis may be found by visiting the NPPC Web site at: www.nppc.org. Information on COOL can be found on the USDA's Web site: www.ams.usda.gov/cool

New Legislation Puts Spotlight On Confinement Sow Housing

Florida voters passed a resolution in November that calls for a statewide ban on gestation stalls for swine. Legislation has been introduced recently in Maryland and California that would lead to a ban on gestation stalls in those states, as well.

In Maryland, H.B. 755 and S.B. 271 would prohibit the confinement of pregnant sows in gestation stalls. At a hearing in late February, a number of industry officials offered testimony in opposition to the legislation.

Dr. John Brooks, Maryland's Deputy Secretary of Agriculture, testified that the American Veterinary Medical Association (AVMA) does

not believe the use of crates harms the health of sows. Virginia Tech's Dr. Mark Estienne added that research shows that sows can be equally healthy in gestation stalls and group pens.

Dr. Tom Hartsock of the University of Maryland said that only about five or six pork producers in the state now use gestation stalls to house sows, but that these family farms "would be in jeopardy" if the legislation is approved.

Also attending to oppose the legislation were the Maryland Farm Bureau, Maryland Pork Producers and the Delmarva poultry industry.

Similar legislation has been introduced in California, but a

hearing had not been scheduled at press time.

The AVMA adopted a resolution last year supporting the use of sow housing configurations that:

- minimize aggression and competition between sows;
- protect sows from detrimental effects associated with environmental extremes, particularly temperature extremes;
- reduce exposure to hazards that result in injuries;
- provide every animal with daily access to appropriate food and water; and
- facilitate observation of individual sow appetite, respiratory rate, urination and defecation and reproductive status by caretakers.

Current scientific literature indicates that gestation stalls meet each of these criteria, provided the appropriate level of stockmanship is administered, according to the AVMA resolution.

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