

# Sheep & Goat HEALTH REPORT

A National Institute for Animal Agriculture Publication

Fall/Winter 2007

## Scrapie Eradication

### 'We Are Succeeding' Declares Dr. Sutton

"We are succeeding in our goal of substantially eradicating classical scrapie from the nation's sheep flocks and goat herds by the end of 2010," reported Dr. Diane Sutton, national scrapie eradication program coordinator of the U.S. Department of Agriculture's (USDA) Animal Health and Plant Inspection Service/Veterinary Services (APHIS/VS) at the joint annual meetings of the U.S. Animal Health Association (USAHA) and the American Association of Veterinary Laboratory Diagnosticians (AAVLD).

Dr. Sutton went on to say, "As a result of industry support and the hard work by our state and federal personnel, there has been a 34 percent decrease between FY 2006 and FY 2007 in percent positive black face sheep sampled at slaughter—0.44 percent to 0.29 percent. The industry has 38 percent fewer new infected flocks in FY 2007 compared to FY 2006."

In addition, all 50 states have perma-

nent or interim scrapie eradication plans in place.

In her presentation, the program coordinator noted that five cases of NOR98-like scrapie have now been identified in the United States and a number of similar cases have been found in Europe.

"We have much to learn about this particular scrapie type," Dr. Sutton said. "We know that it can affect goats and all common genotypes of sheep unlike 'classical scrapie' to which sheep of some genotypes are resistant. There is much debate in the scientific community over the cause, transmission, and importance of this scrapie type to the sheep and goat industry. Research is being conducted on NOR98-like scrapie to address these critical issues. Until more is known we will continue to pursue eradication of both NOR98-like scrapie and classical types in the U.S."

Dr. Sutton discussed other aspects of the

program that will be priority items in the current fiscal year. One priority is to increase slaughter surveillance numbers and improve coverage by sampling in lower volume plants across the nation. A second priority is to determine the prevalence of scrapie in goats. (See Box on page 2 on surveillance at goat slaughter facilities.) The third priority, she said, is a continual priority: To increase producer, dealer, and market identification compliance.

Dr. Cindy Wolf, a well-known leader and scientist in the sheep and goat industry



Dr. Diane Sutton

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## Goat Producers

### First Study on Goats Needs Your Support/Input

Goat producers and goat industry stakeholders are being urged by the U.S. Department of Agriculture (USDA) to participate in an information seeking survey being conducted by National Animal Health Monitoring System (NAHMS) to identify and better understand the most important issues facing the U.S. goat industry. NAHMS will use the survey to develop the study focus and objectives for the NAHMS Goat 2009 study, the first national look at the U.S. goat industry.

#### How can you help?

Before designing any study, NAHMS conducts an extensive needs assessment of an industry, collecting input primarily from producers and industry groups. Input and discussions from these diverse perspectives are then distilled into what eventually becomes the study's focus and objectives. Answers to questionnaires are considered as NAHMS determines the optimal study design to collect the desired data and what biologic samples will be collected for testing.

The needs assessment process has begun

and will continue through January 2008. Actual data collection for the study is scheduled to begin in summer 2009.

Individuals who wish to participate in this important study are encouraged to visit online at <http://www.cvms.colostate.edu/aphi/index.html> by the end of January. The process takes only a few minutes, and the identity of the respondent remains anonymous.

Dr. Katherine Marshall, veterinary epidemiologist at USDA's Animal and Plant Health Inspection Service, Veterinary Services, Center for Epidemiology and Animal Health (APHIS/VS/CEAH) points out that the goat industry is the fastest growing livestock commodity in the United States.

According to USDA's National Agricultural Statistics Service, the U.S. goat population has increased 10 percent annually from 1985 to 2006. In addition, since 1997, the number of dairy goat farms has increased by 45 percent and the number of meat goat farms has

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## 'We Are Succeeding'

(cont'd from page 1)

from the University of Minnesota and a commercial sheep producer, also spoke at the

## Study to Determine Prevalence of Scrapie in Goats Underway

While there have been only 19 cases of scrapie in goats reported since 1990, the extent to which the disease has affected goats has never been documented. USDA is in the process of determining the prevalence of scrapie in the U.S. goat population.

The study started in May of 2007 and is expected to be completed in 2008. The primary sampling sites are those most likely to slaughter goats that have been commingled with sheep and slaughter facilities which have found scrapie infected sheep.

The goal of the study is to determine the prevalence of scrapie in goats; if no scrapie is found we will have 95 percent confidence that the prevalence is below 0.1 percent.

Reno meeting. Dr. Wolf briefed attendees on the scrapie eradication program's progress.

The scientist-producer cited progress towards the goal of eradication and asked for industry-wide support for increased funding for the program. Dr. Wolf pointed out that the fewer the cases that actually exist; the more costly it is to find them. She also noted

that, since the scrapie eradication program is a 10-year program, even a small inflation rate begins to reduce the "buying power" of annual appropriations set when the program was launched.

"We need to work hard now to make sure we have sufficient funds for 2009 and 2010," Dr. Wolf urged. ●

## First Study on Goats

(cont'd from page 1)

increased by 18 percent.

"Currently, there are no national estimates of the health, productivity or management practices of the U.S. goat industry," Dr. Marshall states. "Having this information will help direct future research and educational efforts."

### NAHMS

NAHMS was initiated in the early 1980s to collect, analyze and disseminate information on animal health, animal production, animal welfare, product wholesomeness and the environment. This effort has developed national estimates on disease prevalence and other factors related to the health of U.S. beef cattle,

dairy cattle, swine, equine, poultry, catfish and sheep populations. It works collaboratively with the industry to identify and address information gaps not being studied elsewhere.

NAHMS national studies are confidential and voluntary and rely on producers' participation. APHIS protects the privacy of every participant. No name or address is ever recorded in any APHIS database. No data will be reported on any individual or in a manner that would allow the identification of an animal. The data collected provide producers and other entities with valuable information on livestock populations, diseases, management practices, risk factors, productivity and biosecurity practices of the U.S. livestock industry.

For further information about NAHMS visit: <http://nahms.aphis.usda.gov>. ●

## Still Being Developed

### Rectal Tissue Biopsy Test for Scrapie Looks Promising

Speaking at the USAHA Committee on Scrapie meeting, Dr. Marie Bulgin, a veterinary scientist from Idaho State University (ISU), and Dr. Thomsen of the USDA Veterinary Services Laboratories in Ames, Iowa reported on separate evaluations of the rectal tissue biopsy for scrapie diagnosis. In both evaluations the test showed promising results. The evaluation by USDA was conducted in flocks at various locations throughout the nation.

The evaluation by Dr. Bulgin was conducted on an infected flock maintained by ISU.

Dr. Bulgin and Thomsen agreed that the test appears to be slightly more sensitive than the third eyelid test, the only other practical live animal test for the disease. They also said that animals seem to tolerate it well.

The Committee on Scrapie passed a resolution supporting USDA approval of the test. ●

## NVSL Continues Work on Reliability of B-ovis Test

While a great deal of progress has been made in improving the test for *Brucella ovis* in rams, inconsistency of results between laboratories continues "to some degree" and can be corrected by standardizing test procedures, explained Jeffery Nelson of the USDA's National Veterinary Services Laboratory in Ames, Ia.

"Our goal is to get the various labs working to the same SOP—standard operating procedure—so results are consistent

among them," says Nelson. "NVSL is committed to working with the other laboratories performing the *Brucella ovis* ELISA to make improvements and validate those changes where they are needed.

A serious problem arose two years ago when a reagent used in the test was producing inaccurate results. A new reagent was found and is working well. The inconsistencies among labs could be reduced by using the same SOP.



## Sheep & Goat Health Report

Fall/Winter 2007

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

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# Johne's Program Moving Forward

The National Johne's Working Group (NJWG) and the Johne's Disease Committee, meeting in conjunction with the U.S. Animal Health Association's (USAHA) annual meeting, reviewed the National Johne's Disease Program and took several actions to help move it forward.

"The NJWG includes a Small Ruminants Committee and has always considered sheep and goats as part of the overall Johne's effort," stated Dr. Ken Olson, Johne's Education Coordinator. Dr. Olson added that the sheep and goat Johne's program is administered through the states rather than on a national level.

In a recent informal survey, six states indicated that they have goat programs in place for Johne's, and five indicated that they have sheep programs. Eight other states indicated they work with flocks and herds on testing and/or risk assessments but do not have actual programs for sheep and goat producers.

During the meeting at USAHA, attendees learned that the U.S. Department of Agriculture (USDA) plans to expand efforts in this area, addressing the need in a revised strategic plan.

## Advancing Johne's Work

With efforts focused on cattle, the Johne's Scientific Advisory Committee recommended that the milk ELISA test, which is gaining in popularity with producers, be approved for use in the official Johne's Program when samples are run in an "approved laboratory." This action was endorsed by the NJWG, and approved by the Johne's Committee and USAHA Board. Eight Dairy Herd Improvement Association (DHIA) labs offer the test to producers and anticipate they will run more than 100,000 samples during the coming year.

The group also adopted a recommendation to allow authorized DHIA technicians to collect milk samples for the ELISA test to be run in approved DHIA labs.

"When implemented, these actions will make 'official' Johne's testing easily available to more producers and should provide a strong boost for the program," Dr. Olson states.

Scott Wells, Johne's Committee chair, presented a concept paper suggesting that program herd classification levels be revamped. With revised classification levels, test negative herds and herds with animals that test positive but are actively working to control the disease would be classified on a continuum. The proposal

would continue to recognize "low risk" herds while providing increased recognition for herds that use available tools to reduce disease incidence and decrease the risk of spreading the disease. This concept will be considered as a revision for the program.

The current Johne's Strategic Plan was adopted in 2004 and updated in 2005. Meeting participants recognized the need to review the plan to assure it addresses current producer needs. Resolutions supporting development of an updated strategic plan were adopted with the expectation that a draft will be put forward by the National Institute for Animal Agriculture (NIAA) annual meeting in April 2008. A strong effort will be made to obtain producer input for development of the plan.

## Survey on Tap

A valuable source of input—for the sheep and goat industries as well as the beef and dairy industries—will be the national dairy producer survey on Johne's being mailed to more than 7,000 producers across the country. The survey is funded by Johne's Disease Integrated Program (JDIP) and coordinated by Dr. Ernest Hovingh of Pennsylvania State University and Dr. Olson.

"The survey will allow us to assess producer knowledge of the disease and program, program participation barriers and effective incentives for Johne's program participation," Dr. Olson states. "It will help identify changes needed in the program as well as new materials that would be most useful to producers. While initial national results show that education programs have been effective, the majority of dairy herds in all regions have the disease. A significant amount of work remains to be done," Dr. Olson elaborates.

During the meetings, preliminary results from the National Johne's Disease Demonstration Herd Project were presented. Work from two large Texas dairy herds, reported by Dr. Mario Villarino, showed that Johne's positive cows were removed from the herd about 130 days sooner than negative cows. Lifetime production was reduced by over 8,900 pounds, and replacement costs were increased by over \$205/positive cow. Implementation of recommended management practices resulted in net savings of nearly \$123,000 per year in a 5,000-head cow herd.

Dr. Beth Patton reported on three Wisconsin demonstration herds that include vaccination in their herd plans.

Dr. Patton explained that, before vaccination, each herd was required to comply with all state vaccination requirements. She pointed out that preliminary results appear positive, with an apparent reduction of the incidence in these herds. Additional data will be gathered in these herds to provide a more comprehensive assessment of the process.

Work also continues on the research front. Dr. Vivek Kapur, leader of the JDIP, announced approval by the U.S. Department of Agriculture Cooperative Research, Education, and Extension Service's (USDA/CREES) National Research Initiative of a four-year extension for the program. JDIP coordinates a comprehensive research program that looks at new diagnostics and therapeutics as well as identifies ways to make current tools more useful.

As a supplement to the ongoing program, USDA/Animal and Plant Health Inspection Service (APHIS) is providing funds for a special three-year project to develop and evaluate new vaccines for possible use in the program.

Presentations from the NJWG meeting are available on the Johne's Education site [www.johnesdisease.org](http://www.johnesdisease.org). They can be found by clicking on "NJWG."

## NIAA 2008 Annual Meeting Animal Care and Well-Being: Facts NOT Fiction

April 1-3, 2008

The Westin Indianapolis  
Indianapolis, Indiana

**Who should attend?** Producers, animal health and management professionals, animal agriculture extension specialists and everyone who is involved in or cares about animal agriculture—cattle, swine, sheep, goats, poultry and equine—and its future.

**Why attend?** The future of animal agriculture depends on you. We'll look at issues impacting animal agriculture, the implications of these issues and what is or can be done to address the issues.

**How register?** Register today online at [www.animalagriculture.org](http://www.animalagriculture.org). Save up to \$125 if register before Feb. 25! Any questions feel free to call NIAA at (270) 782-9798.

# NAIS Business Plan Under Development Lists 7 Strategies

During the general session of the National Institute for Animal Agriculture's (NIAA) ID•INFO EXPO in Kansas City, Mo., in August, Dr. John Clifford, Deputy Administrator, USDA/APHIS/Veterinary Services, publicly announced a business plan for advancing animal disease traceability.

This business plan supplements the National Animal Identification System (NAIS) Draft User Guide which was issued in 2006 and is being updated and re-published in December 2007. The NAIS Business Plan was also explained at the October joint annual meetings of the U.S. Animal Health Association (USAHA) and the American Association of Veterinary Laboratory Diagnosticians (AAVLD).

"We are excited about the future of NAIS," stated Neil Hammerschmidt, one of three NAIS program coordinators. "We've come a long way. . . we are headed in the right direction."

As of Oct. 30, 2007, premises registration had totaled 422,852.

"While premises registration continues to be a priority, premises registration alone will not get the job done," Hammerschmidt emphasized. "Animal identification is progressing as well."

Hammerschmidt emphasized that the NAIS business plan is being designed to obtain the greatest return on investment while advancing traceability. The approach taken also focuses on establishing action relevant for each species.

## Plan Includes 7 Strategies

The NAIS business plan to advance traceability is comprised of seven strategies:

Strategy 1: Prioritize species/sectors.

Strategy 2: Harmonize animal identification systems.

Strategy 3: Standardize data elements of disease programs to ensure compatibility.

Strategy 4: Integrate automated data capture technologies with disease programs.

Strategy 5: Partner with states.

Strategy 6: Collaborate with industry.

Strategy 7: Advance identification technologies.

## Strategy 1

To maximize the effectiveness of resources, NAIS program coordinator Dr. John Wiemers explained that species have been prioritized into two tiers. Tier 1 encompasses primary food animals—cattle, swine, poultry, sheep, goats, deer and elk—and equine. Horses are listed as a priority due in part to frequent animal movement. Tier 2 covers all other livestock.

Each tier is then broken into three categories: high priority, medium priority and low priority.

Within Tier 1, bovine is a high priority, ovine is a low priority and all other livestock are a medium priority. Dr. Wiemers noted that sheep are ranked as a low priority "not because they aren't important."

"It just means that that ship is sailing straight with a full sail. They have a good hand on the rudder. The resources are there to make that sector very capable of traceability," Dr. Wiemers told those attending ID•INFO EXPO. In the end, the sheep industry will require less resources and is therefore ranked as a lower priority because of the Scrapie eradication program.

## Strategy 2

"The harmonization of animal identification systems will result in more cost-effective options benefiting producers while achieving increased animal disease traceability for the entire industry," Dr. Wiemers stated.



*Neil Hammerschmidt gives an overview of the NAIS business plan.*

Domestic programs that fall under the "harmonization" strategy include breed association and performance recording, Agricultural Marketing Services (AMS), Quality Systems Assessments and industry alliances. "Standardization

of animal identification with our trade partners is imperative," Dr. Wiemers said.

## Strategy 3

Dr. Wiemers specified the integration of NAIS with disease programs as "one of our immediate priorities." National standards will be set, and definitions will be

given in regulatory form.

The sole version of animal identification number recognized will be 840. A transition or sunset date will aid moving to this Animal Identification Number (AIN).

"Additionally, the seven character Premises Identification Number (PIN) will be recognized as the sole official format for the premises identification number," Dr. Wiemers shared. "Other formats can be used for other purposes, but, for official disease control programs for state movement of livestock, the seven-character PIN will be the official format."

## Strategy 4

"Several of the existing disease control programs have begun to incorporate various data capture technologies.

Further integration of these technologies will provide great benefit to our traceability," Dr. Wiemers stated.



*Dr. John Wiemers discusses Strategies 1-4.*

## Strategy 5

During ID•INFO EXPO, National Animal Identification System (NAIS) program coordinator Dr. Dave Morris said that the NAIS business plan recognizes the need for states to address local disease priorities as well as the need to focus on species industries in their most prominent areas of needs.

"USDA will continue to support state, tribe and territory cooperative agreements," Dr. Morris elaborated. States will be responsible for identifying traceability risks and identify how such risks will be addressed.

## Strategy 6

Dr. Morris listed several collaborative efforts in place with industry partners. Groups cited by Dr. Morris included but were not limited to National Pork Board, American Angus Association, National Milk Producers Federation, and National Future Farmers. USDA is also planning to work cooperatively with accredited veterinarians, Brand State Working Group, packers and renderers. Veterinarians were acknowledged as being first responders to outbreaks.

"These are important to us because

these producers receive information directly from these organizations and can assist our efforts greatly," Dr. Morris stated. Work includes outreach efforts and identification of premises.

Additional partnerships efforts that are a USDA priority include those with feedlots, livestock markets, industry alliances and harvesting facilities.

#### Strategy 7

The advancement of identification technologies strategy addresses both today's technologies and emerging technologies. Performance standards will be pinpointed, with advancing technologies evaluated. The goal is to have accurate, timely information.

#### Summary

In closing remarks to ID•INFO EXPO participants in Kansas City, Dr. Morris stated, "We will continue to advance traceability through industry-state-federal partnerships."

The NAIS business plan for advancing animal disease traceability is in draft stage,

with the USDA seeking input from targeted groups. NAIS staff liaisons conducted conference call discussions with the species working groups and the subcommittee in early November. Similar teleconferences were hosted by USDA with industry organizations, state animal health officials, areas veterinarians in charge and staff members working on animal ID issues.

"While not all comments may be addressed in the published draft, we intend to read and review each of them before publication," Dr. Clifford stated. "The USDA appreciates past contributions to the development and implementation of NAIS and will continue to work with industry to make the program a success." ●



*Dr. David Morris share information regarding Strategies 5-7 and provides the summary.*

The NAIS coordinators stressed that the business plan and concepts and strategies focus on the areas with the greatest returns on investment, and will utilize a critical mass approach.

"We look at critical mass as best estimate of participation level needed to advance and achieve a more functional traceability system," Dr. Morris stated.

"We anticipate that critical mass will predictably vary by species."

Until more information is available, 70 percent level of participation is the level set. That level will be exceeded by some species. Dr. Morris noted that commercial poultry has about 95 percent participation while swine is close to being 100 percent. Sheep and goats are at 75 percent traceability and should advance to 90 percent.

Dr. Morris cited the cattle industry as having "the longest journey" among the species. A bookend approach will be taken, with the goal of reaching the 70 percent level, focusing on termination records reported at harvest.

## The Skinny on Sore Mouth

Despite research, "sore mouth," also known as "scabby mouth" or contagious ecthyma, remains an industry challenge. A six-year-old survey showed that four out of 10 U.S. sheep and goat operations reported sore mouth infecting their flocks in the previous three years. And, with no known treatment and only 14 percent of nursing lambs vaccinated—and just 5 percent of operators using a vaccination in replacement or breeding ewes, sore mouth will continue to invade sheep and goat herds.

The poxvirus that causes sore mouth is found worldwide and is easily spread between animals and can be passed from an infected kid to a doe's teats. Additionally, the scabs of infected animals contain virus. As

such, scabs that fall off an infected animal can serve as a source of infection to susceptible animals for up to a month. A flock can also become infected through contaminated soil, bedding, feed or trucks or by direct contact with infected animals such as at shows or replacement animals brought onto the operation.

The sore mouth virus can be passed within a flock by carrier animals that may not show symptoms.

Once an animal has been infected, it



takes two to 14 days for the first signs of disease to appear. Infected animals usually recover from sore mouth within a month.

Animals may become infected with sore mouth more than once in their lifetime although infections are likely to occur years apart and subsequent infections are usually less severe.

Sore mouth lesions are painful and may cause reduced feed intake and weight loss. In a young kid, these sores can cause the kid to stop nursing. As a consequence, the kid may incur severe weight loss, stunted growth or even death. If a doe's teats become infected, she may become too painful to nurse the kid and will abandon it.

Being a zoonotic disease, sore mouth can be transmitted to human who come in contact with infected animals. People often develop sores on their hands. These sores may be painful and can last for up to two months. People do not infect other people, however.

#### Protecting Against Sore Mouth

Certain measures can be taken to lessen the risk of sore mouth infection:

1. Reduce the likelihood of mouth and muzzle cuts. For example, remove thistle or harsh brush from grazing areas.
2. Quarantine new animals until sore

mouth can be ruled out.

3. Avoid bringing animals with sore mouth to public events such as fairs and shows.

In addition, since sore mouth may be transmitted through saliva, it is recommended that hands not be placed on the muzzle or inserted into the mouth of sheep and goats at shows and then placed on or into the mouth of other sheep and goats from other flocks in the showing or pens.

Commercial live virus vaccines are available to help protect against sore mouth. Producers considering the use of an orf vaccine should consult a veterinarian. Use of a vaccine is only suggested for previously infected flocks since the vaccination will cause an orf infection in the animals and could lead to contamination of the operation with virus-containing scabs. In addition, all sore mouth vaccines contain live virus that can cause infection in humans. As such proper protective measures must be taken when vaccinating.

If you observe animals that appear to have more serious symptoms than sore mouth, call your veterinarian, state or federal animal disease control officials or your county agricultural agent. The reason: foot-and-mouth disease resembles sore mouth and can affect sheep and goats. Although FMD has not occurred in the United States since 1929, one cannot be too cautious. ●

## UK Hit with FMD, Bluetongue

Dairy producer Raymond Brown of the United Kingdom (UK) addressed the 2007 ID•INFO EXPO in Kansas City, Mo., in late August. His topic: Disease control and the ability of the British Cattle Movement Service (BCMS) to forward and backward track sentinel animals using individual animal identification and movement records. During his presentation, Brown remarked, "you never know what disease challenges are around the corner."

Within a two-month time frame, Brown's remark took on additional meaning as two devastating animal diseases—FMD and bluetongue—struck Brown's homeland. This was the first incidence of FMD since 2001, and the first incidence of bluetongue ever.

### FMD Strikes First

The UK's Chief Veterinary Officer reported that cattle on a farm near Guilford, Surrey, had foot-and-mouth disease (FMD) on Aug. 3. Tests confirmed that 39 animals had the disease and more than 100 cattle were culled to try to contain it. By the end of September, eight premises had been infected.

An investigation carried out by the UK government's Health and Safety Executive (HSE) linked the outbreak to a combination of unfortunate events at a British government-controlled laboratory site. The events started with wastewater containing the live virus strain—O1BFS—entering the drainage pipework, leaking out and contaminating surrounding soil. Then construction activities near the effluent drainage system disturbed and moved the soil in a way that contaminated some of the vehicles with the live virus.

"We established that some of the vehicles, probably contaminated, drove from the site along a road that passes the first infected farm," the government-issued report stated.

Although reports initially pinpointed Merial Animal Health Ltd. as the sole out-

break source, the government's investigation spread the outbreak's responsibility among three organizations.

"Three organizations operating at the site—the Institute for Animal Health (IAH), Merial Animal Health Ltd (Merial) and Stabilitech Ltd (Stabilitech)—all worked with varying amounts of the live virus strain—O1BFS—that caused FMD in the first infected herd in Surrey," the report reads. "Results of sequencing tests commissioned as part of the investigation indicate that this strain is highly likely to have originated from the Pirbright site. However, due to very small differences in the strains used by the three organizations, it has not been possible to pinpoint precisely the exact origin of the virus found in the infected animals."

HSE's report, submitted to the Secretary of State for Environment, Food and Rural Affairs on Aug. 31, concluded there was no evidence of a biosecurity failure—as originally thought—and no biosecurity arrangement were breached through malicious intent of staff.

HSE and the Department for Environment, Food and Rural Affairs (DEFRA) issued a coordinated safety alert to employers conducting work on pathogens in hazard groups 3 and 4 as a reminder of the measures needed to ensure primary and secondary containment.

"This safety alert is to draw employers' attention to issues arising from our investigation which need wider dissemination and action," HSE Chief Executive Geoffrey Podger continued. "Although these issues already form part of the basis on which such sites are permitted to operate, the purpose of the alert is simply to remind operators of their obligations. Both HSE and DEFRA will be reviewing these issues during their usual regulatory vis-

its with the priority attention focused on sites handling hazard group 4 pathogens."

### Bluetongue

Within 30 days of the release of the HSE's report on FMD, Britain's first case—and the first occurrence ever—of bluetongue was confirmed at a rare breeds farm. Within two weeks, more than 20 cases of the disease had been confirmed. Within four weeks, that number had grown to 50 confirmed premises affected by bluetongue.

To halt the spread of the virus, UK veterinarian officials quickly established protection zones and control zones.

The strain of the virus detected was the same BIV8 strain that has swept across Germany, France and the Netherlands, causing huge losses in livestock. It is speculated that the virus was transmitted by a cloud of midges blown by warm winds across from Germany, the Low Countries or northeastern France.

"The only thing saving us from bluetongue is our climate," stated Prof. Peter Mertens of the Institute of Animal Health at Pirbright in Surrey. "If we start having frost, it will kill off the majority of adult midges. A few good frosts will really bring the midge season to an end. When that happens, it's the end of transmission."

While there is no vaccine usable in Britain, the virus cannot replicate beneath 15°C.

Another fear looms, however. Despite the seasonal death of midges, the disease is known to return the next year—a process known as "overwintering." And, often, when the disease does return, it returns with greater intensity.

Merial—the same Merial that has facilities at Pirbright, England—is reportedly developing a killed vaccine which is predicted to be ready by 2008. ●

## NIAA Directors Headline Speaking Program

Dr. Cindy Wolf, Dr. Peter Timoney and John Adams, all three members of the National Institute for Animal Agriculture's (NIAA) Board of Directors, delivered major addresses at the only joint general session of the recent meetings of the U.S. Animal Health Association and the American Association of Veterinary Laboratory Diagnosticians in Reno in October.

The general theme of the session was the status of major diseases facing U.S. animal agriculture. Dr. Wolf, a sheep and goat specialist/producer, updated the industry

on the scrapie eradication program and urged the industry to support the final push toward eradication. John Adams, recently retired CEO of the National Milk Producers Federation and a dairy farmer, detailed the effort to control Johnes' disease, a non-program effort, first initiated by industry and now a government-industry effort.

Speaking on behalf of Dr. Charles Issel, his colleague at the University of Kentucky, Dr. Timoney addressed the disease, equine infectious anemia (EIA.) EIA is largely under control in most areas of the

country, due to state regulations which require coggins test annually. Drs. Timoney and Issel agree the industry must decide how to go forward with EIA. For example, in most areas of the nation, the control program could work well with tests administered at the time of sale rather than annually, thus saving producers millions of dollars.

All three speakers agreed from their various perspectives that producers/industry must drive the future of these and other diseases of concern. ●

## News Briefs News Briefs News Briefs News Briefs News Briefs

### USDA Contracts with 3 Ear Tag Manufacturers

The USDA issued contracts in October to three manufacturers—Allflex USA Inc., Digital Angel Corp. and Global Animal Management—to produce 1.5 million radio frequency identification (RFID) ear tags that are compliant with National Animal Identification System (NAIS) standards. The ear tags will be used specifically for USDA state-federal cooperative disease control and eradication efforts. The average cost per unit to USDA for the bulk purchase is approximately \$1.13 per tag.

### Bech New Deputy Administrator for BRS

Rebecca Bech has been named deputy administrator for biotechnology regulatory services (BRS) in the U.S. Department of Agriculture's Animal and Plant Health Inspection Service (APHIS). Bech began her career with APHIS in 1986 and has been with BRS since the program's inception in 2002. She most recently served as associate deputy administrator for BRS' emerging and international programs and as acting deputy administrator for BRS.

### 100 Years Old

Colorado State University's Department of Veterinary Services turned 100 years old in 2007. The Colorado State Board of Agriculture established the Department of

Veterinary Services in 1907, and three years later, the first class—consisting of 27 students—graduated. Today, 100 years after its inception, the CSU College of Veterinary Medicine and Biomedical Sciences receives more than 1,600 applications a year to its professional veterinary program. CSU reports that its college is consistently ranked among the Top 2 colleges of its kind in the nation and receives more federal funding to support research than any other college of its kind.

### Jones Named Deputy Administrator for Legislative and Public Affairs

Bethany Jones has been named deputy administrator of the legislative and public affairs (LPA) unit in the U.S. Department of Agriculture's Animal and Plant Health Inspection Service (APHIS). In her new role, Jones is responsible for the overall planning and direction of LPA activities, which include media and industry outreach, legislative analysis, Freedom of Information and Privacy Act requests, production of informational materials, and response to media, congressional, intergovernmental and citizen inquiries about APHIS programs.

### Dr. Hillman Presented National Assembly Award

Dr. Bob Hillman, Texas State Veterinarian and Executive Director of the

Texas Animal Health Commission (TAHC), was presented the 2007 National Assembly Award for his outstanding contributions to U.S. animal health in the regulatory field. The award was presented to Dr. Hillman at the joint general session of the United States Animal Health Association (USAHA) and the American Association of Veterinary Laboratory Diagnosticians (AAVLD) in Reno, Nev. Dr. Hillman was president of USAHA in 2001 and is currently on the Secretary of Agriculture's Advisory Subcommittee for the National Animal Identification System (NAIS).

### APHIS Animal Health Award to Dr. Elvinger

Dr. Francois Elvinger, professor of veterinary epidemiology at the Virginia-Maryland Regional College of Veterinary Medicine, Virginia Polytechnic Institute and State University, has been presented the 2007 APHIS Animal Health Award, also known as the APHIS Administrator's Award. Dr. Elvinger was recognized for his contributions to animal health improvement in the areas of information management, animal disease surveillance and appropriate responses to the identification of disease. Dr. Elvinger is currently chair of the National Animal Health Surveillance Steering Committee, which is charged with guiding APHIS' National Surveillance Unit (NSU) in the design, planning and implementation of efficient and accurate surveillance for relevant animal diseases. ●

## WANTED: National Surveillance Systems

A meeting of the joint U.S. Animal Health Association (USAHA) and American Association of Veterinary Laboratory Diagnosticians (AAVLD) Committee on Animal Health Information Systems at the associations' annual meeting, in Reno, on Oct. 23 resulted in a key action: the group wants comprehensive and integrated surveillance systems developed at the national level to progress rapidly. The committee also called for the development of a "national reportable animal disease list."

Having a comprehensive, integrated National Animal Health Surveillance System (NAHSS) would address—and ulti-



mately answer—multiple questions. Three top-of-mind questions includes

- 1) Can the USDA rapidly find disease throughout the nation wherever it may arise?
- 2) Can the U.S. make statements about its national disease status that will convince trading partners and consumers

that American agricultural products are safe and disease free?

- 3) Can national policy decisions be based on actual surveillance data so that tax dollars can be spent wisely?

The group agreed that a comprehensive national surveillance system should focus on diseases of significant economic

or health impact, such as foot-and-mouth disease, and on emerging diseases and issues. Another point of agreement was that the information system infrastructure be built to support a comprehensive and integrated surveillance system where efficiencies might be gained by leveraging efforts and activities across diseases, species, field activities, laboratory specimens, database development and even standardized analytic and reporting methods.

Dr. Bruce Akey, director of the Cornell University Veterinary Diagnostic Laboratory and co-chair of the joint committee, stresses that the "old" way of surveillance has shown great success in eradicating many diseases where a sample col-

**WANTED***(cont'd from page 7)*

lector's approach to surveillance is "stove piped" to one sample, one test, one disease, one location, one of many databases and information that represents a fraction of American industry but cannot provide confidence to consumers and trading partners about the disease status for the United States as a whole. He adds that the "new way" of surveillance is more applicable in today's world of diseases that are rare but of great concern to those who buy U.S. products.

"In a new and comprehensive surveillance system, one sample could serve multiple purposes," Dr. Akey states. "It will be tested for several diseases, both species specific and cross species.

"Test results will be electronically transmitted through the National Animal Health Laboratory Network (NAHLN) backbone. This information will be fed upward to a centralized database and is to be available for use at the state and local levels."

Dr. Aaron Scott, Centers for Epidemiology and Animal Health (CEAH), National Surveillance Unit (NSU), Fort Collins, Colo., emphasizes that surveillance is not the business of collecting samples—it is the business of collecting information.

"A comprehensive and integrated national surveillance must be designed for finding samples that have the most information value. If the characteristics of the disease permit a sample from one animal or farm to provide that information for two diseases, then we have gained efficiency," Dr. Scott explains. "This kind of surveillance system, however, is far more encompassing than simply doing two tests on one sample."

Dr. Scott offered several examples of a comprehensive, integrated approach. Field operations might use common infrastructure for multiple diseases—from staff, trucks, copy machines to sample sources. In addition, with the "new way," laboratories might use standardized data systems for reporting results, and database designers might use modules that are based on a

common template rather than starting fresh for each disease. Data entry systems might be integrated so that field personnel can enter multiple sets of data through a common portal at the sight of the sample collection."

"The system is comprehensive when it provides information about all of the population and multiple diseases and is representative of all the nation," he adds.

Dr. Scott points out that the 21st Century has seen increased mobility of people and movements of animals. As such, he says there will be growing need to demonstrate to American consumers and foreign trading partners that U.S. food and livestock are disease free.

"To gain and maintain this confidence, we must be able to make statements about disease status in our nation and industries as a whole, and we must leverage the limited funds in the most efficient manner possible—that is what comprehensive integrated national surveillance is all about," he summarizes.

