



# USAHA

Protecting Animal and Public Health Since 1897

United States Animal Health Association Newsletter - Vol. 29, No. 1, January 2002

## BSE RISK LOW IN U.S.

By Madelaine Fletcher, USDA Communications Manager

**B**ovine Spongiform Encephalopathy (BSE) has not been detected in the United States, and a recently released Harvard study shows a very low risk of it occurring here. The study, commissioned by the U.S. Department of Agriculture (USDA), shows that early protection systems put in place by the USDA and the Department of Health and Human Services (HHS) have been largely responsible for keeping BSE or "Mad Cow Disease" out of the country, and would prevent the disease from spreading if it ever did enter the United States.

"Based on three years of thorough study, we are firmly confident that BSE will not become an animal or public

health problem in America," said Dr. George Gray, deputy director of the Harvard Center for Risk Analysis, and director of the project.

•No BSE has been detected in U.S. cattle, nor has a human case of variant Creutzfeldt-Jakob Disease (vCJD) been reported here.

•USDA has been working for years to put in place preventive measures—a firewall—to keep BSE from entering the cattle and food supply. As a result, the potential for human exposure here is quite low.

•USDA commissioned the assessment to evaluate preventive measures already in place, to assess their strengths and determine other measures that need to be implemented.

•The goal is to bring the risk as close to zero as possible.

The assessment evaluated ways BSE could spread if it were to enter the country. The report's purpose is to give agencies a scientific analysis to evaluate preventive measures already in place and identify additional actions to minimize the risk of BSE.

### USDA Actions

In response to the report, USDA, in cooperation with the HHS, will act to strengthen BSE prevention programs and maintain the government's vigilance against the disease, according to Secretary of Agriculture Ann Veneman.

1. USDA will have the risk assessment peer reviewed to validate its scientific integrity. Outside experts will determine if the data were correctly interpreted and if the computer model can be used to evaluate "what if" scenarios.

2. Because surveillance is a critical part of the USDA's strategy, the number of cattle tested for BSE will more than double in 2002. More than 12,500 cattle samples will be targeted for testing.

3. USDA will soon publish an options paper outlining additional possible regulatory actions to limit the risk of BSE exposure. The options, to be tested under the Harvard computer model, will include: prohibiting use of brain and spinal cord from specified cattle in human food; prohibiting use of central nervous system tissue in boneless beef products, and prohibiting use of the vertebral column from certain categories of cattle, including downed animals, in the production of meat from advanced meat recovery systems. USDA will invite public comment on the options before proceeding with appropriate regulatory actions.

4. USDA will propose to prohibit the use of certain stunning devices to immobilize cattle during slaughter.

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## News Briefs

- A small cattle herd in Montgomery County, Texas, was diagnosed with **brucellosis** Dec. 3, 2001, and will be depopulated. A second infected herd, in Rusk County, Texas, was approved for depopulation.
- Antibodies to **H7N2 subtype avian influenza** were detected in broiler chickens from a multi-age operation in Scotland, Conn. The virus was isolated from animal and environmental samples. The H7N2 antibodies were detected in one of two houses on the premises, each containing approximately 8,000 birds; all 16,000 fowl were destroyed because they were no longer marketable due to the seropositivity. The same type of AI is found in area bird markets, which raises concerns about control issues.
- **Pseudorabies** Update: Iowa has zero quarantined herds and Nebraska has zero herds quarantined.
- **Chronic Wasting Disease** has been reported in seven Colorado herds. Exposed elk have been shipped to more than 40 ranches in Colorado. Movement of animals was stopped for 90 days and only imports from herds that have been monitoring for the disease 36 months are permitted. Colorado, Wyoming, Montana, Oklahoma, South Dakota, Kansas, Nebraska and Saskatchewan Canada have all experienced CWD.
- The **federal sheep and goat identification rule** went into effect Nov. 19, 2001. USDA has established a public information phone line at 1-866-USDA-TAG.
- The United Kingdom declared on Jan. 14, 2002 at midnight they have no more cases of **foot-and-mouth disease**.

## USAHA People

- **Dr. Taylor Woods** has been named Missouri State Veterinarian.
- **Dr. Joan M. Arnoldi** has been selected as Michigan State Veterinarian and Director of the Animal Industry Division.
- **Dr. John W. Hunt** was named Associate Director of Animal Services Division of the Arizona Department of Agriculture.
- **Dr. Alfonso Torres** will leave USDA to take a position with Cornell University School of Veterinary Medicine.
- **What's your favorite food?** The USAHA Hospitality Committee plans to compile a cookbook featuring regional recipes and state specialties. The committee needs your favorite traditional recipes from appetizers to desserts. The purpose of the cook book is to promote camaraderie and to show appreciation to the members of USAHA and AAVLD whose life work is to keep America's food safe. Committee members hope to sell the cook book at the meeting in St. Louis. Please submit your entries by 2/15/02. Expect a call if your state is not represented! Please send or email your contributions to Cindy Zirkle at P.O. Box 160; Fairton, NJ 08320, or [zirkle@bellatlantic.net](mailto:zirkle@bellatlantic.net). Thank you all in advance for your assistance. The Hospitality Committee: **Eleanor Alley, Caroline Bryan, Sharon Lea, Donna Notter, Sue Sims, Cindy Zirkle.**
- **Ms. Beverly Baden** has left her position at the USAHA office. Good Luck Beverly!

## CONTACT INFO

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# Maxwell Lea, DVM

**O**n behalf of the Executive Committee and the administration, I wish everyone the best for the New Year. I hope we all are blessed with happiness, prosperity and peace for 2002.

The annual meeting in Hershey was a great success. Many thanks to Bob Hillman, J. Lee Alley, John Enck, Bob Eckroade, Linda Ragland, Beverly Baden, and all the staff members whose hard work made the meeting successful. The accommodations and facilities at the Hershey Lodge were excellent for our meeting.

USAHA's future looks bright. We have many responsibilities and challenges but never more opportunities to enhance the health and well-being of animal agriculture

in this country. The events of last year—BSE, foot-and-mouth disease, September 11—have awakened and energized this country at all levels. We have all been deeply affected and deeply involved in the changes these incidents have brought about.

The Master Plan for renovation and revitalization of this country's animal disease diagnostic and research capabilities is moving ahead. Some of the necessary funding has been appropriated, but all involved parties must continue to focus on this project until it is complete. An opportunity to get these much-needed facilities and capabilities will probably not present itself again in the near future.

Never has there been such open communication and cooperation as at



this time among stakeholders in the animal health business. It is imperative that this atmosphere of cooperation and communication be maintained, nurtured and expanded. No single entity with animal health responsibility can completely cope with some of the emergencies and other situations that may develop. We must all organize, plan, train and work together to make sure we uphold our responsibilities as best we can. All the stakeholders—federal government, state governments, animal agriculture commodity interests, researchers, producers, diagnosticians and educators—must do their part and work with all other interests to provide the best protection possible for the livestock and wildlife of this country.

I would like to urge all of our members to support USAHA and remain active in the organization. Please participate in committee activities of interest to you. The strength of this organization lies in its strong, active committee system. Information from these committees has always been factual and science-based, and thus can be depended upon by those who use it.

We are all anxious for suggestions and input. Please do not hesitate to contact me or an Executive Committee member or a committee chairperson with any comments, suggestions or help you may have.



Dr. Richard Breitmeyer, California State Veterinarian, (left) was presented the APHIS Administrators' National Animal Health Award by William T. Hawks, Under Secretary, Marketing and Regulatory Programs, USDA.

## J. Lee Alley, DVM

Nine-hundred-seventy-seven registrants, guests and spouses attended the 105<sup>th</sup> Annual Meeting of the United States Animal Health Association and the 44<sup>th</sup> Annual Meeting of the American Association of Veterinary Laboratory Diagnosticians (AAVLD) in Hershey.

USAHA's membership approved new bylaws to govern the association. The newly approved bylaws were developed by the Constitution and Bylaws Task Force that President Dick McCapes established in 1999. Members of the task force were Larry Williams, J. Lee Alley, Bob Eckroade, Nancy Robinson, Ernie Zirkle, Harvey Gosser, Lee Myers and Conley Byrd.

New bylaws changed the names of the two USAHA governing bodies. Under the new bylaws, Board of Directors becomes Executive Committee and Executive Committee becomes Board of Directors. The Executive Committee is comprised of the association's elected officers. The membership of the Board of Directors includes official agencies, allied organizations, regional delegates and international members.

Members approved 28 resolutions. Copies can be viewed on the web at [www.usaha.org](http://www.usaha.org).

Committee reports and news releases pertaining to the annual meeting can also be accessed on the USAHA web page. Written proceedings of the meeting are being prepared and will be mailed to the membership during early 2002.

The Joint USAHA/AAVLD Annual Session on Sunday evening, including the President's Reception and Dinner, was the highlight of the meeting. Pennsylvania's Secretary of Agriculture, Samuel E. Hayes, Jr., welcomed the attendees.

William T. Hawks, Under Secretary, Marketing and Regulatory Programs, USDA, presented Richard Breitmeyer, California State Veterinarian, the APHIS Administrators' National Animal Health Award.

Dr. Breitmeyer was also honored as the recipient of the 2001 National Assembly Award by National Assembly President Tom Hagerty.

Two amendments to the bylaws were approved by the Board of Directors: to allow the Executive Committee to approve new individual members; and to allow the Chair of the Board of Directors majority approval of the Board to call for an executive session with limited attendance. The amendments will be printed in the *2001 Proceedings* and must be voted on by the membership at the 106<sup>th</sup> Annual Meeting.



During the business sessions, Past President Ernie Zirkle gave the Committee on Nominations report, Treasurer Wes Towers reported on the association's financial status and President Hillman updated members on the "State of the Association." President Hillman then passed the gavel to President-Elect Mack Lea, who in turn spoke to the membership on his plans for the upcoming year.

Past President Zirkle presented President Hillman with a plaque commemorating his year as President and the gold Past Presidents' pin.



Officers elected for 2002 are: (front row, left to right) First Vice President Don Lein; President Maxwell Lea; President-Elect Bob Frost; Second Vice President Rick Willer; (back row, left to right) Third Vice President Bret Marsh; Treasurer Wes Towers; and Secretary J. Lee Alley. Elected regional delegates (Not pictured) are: R.J. Eckroade, PA; V.P. LaBranche, MA; C.W. Geary, WI; J. W. Leafsteadt, SD; R.E. Good, AR; M.S. Silberman, GA; P. Von Holt, HI and C. Lum, HI.

# Resolution #1: Unanimously Approved

## USDA ARS/APHIS MASTER PLAN

*By Bob Frost*

### **Resolution:**

**T**he United States Animal Health Association strongly supports the United States Department of Agriculture's Agriculture Research Service (ARS) Animal and Plant Health Inspection Service (APHIS) Master Plan for Facility Consolidation and Modernization of the ARS National Animal Disease Center, the APHIS National Veterinary Services Laboratories, and the Center for Veterinary Biologics and recommends the immediate funding of all costs of construction, equipping, operation and maintenance of the Ames, Iowa national animal health facilities depicted in the USDA six-year Master Plan. We applaud the recent support shown by both houses of Congress in appropriations for planning the facility, but that is not sufficient for the most rapid and efficient programming and construction of these critical facilities. These facilities are essential to protect and ensure our nation's food safety and supply and its \$120 billion animal industries. USAHA encourages Congress to provide mandatory (earmarked) funding for the Master Plan.

This resolution shall be delivered to the Secretary of Agriculture, Congress, and the President of the United States of America.

*-Hershey, Pennsylvania - November 1-8, 2001*

### **Background:**

The United States Department of Agriculture (USDA) has identified the need to establish, fund and maintain a new facility in Ames, Iowa, to meet urgent national needs for research, diagnosis and product evaluation related to animal health. The proposed facility will replace outdated and inefficient facilities currently used by the Animal and Plant Health Inspection Service (APHIS) National Veterinary Services Laboratories (NVSL), the APHIS Center for Veterinary Biologics (CVB), and the Agriculture Research Service (ARS), National Animal Disease Center (NADC). In 2000, USAHA passed a resolution supporting the Master Plan for Facility Consolidation and Modernization. Both houses of U.S. Congress responded by appropriating \$40 million for planning.

USDA's ARS and APHIS Master Plan for facility consolidation and modernization is of vital concern to the USAHA. The United States currently cannot meet the standards we require of our trading partners, nor will we be able to continue to meet the requirements established by the Office of International Epizootics (OIE). Deplorable laboratory conditions jeopardize the health of the nation's vast animal populations including our animal industries, placing America in a position of reliance on foreign laboratories and diagnostic procedures.

The \$120 billion U.S. animal industry is second to none in the world, contributing greatly to the positive side of our trade balance. This nation's livestock stakeholders and citizens must have modern, updated diagnostic, research and reference laboratory facilities to meet

international health standards to access freer markets. Updated facilities are critical to detect and prevent the incursion of devastating and deadly foreign animal or emerging diseases into the United States.

The USAHA and other national stakeholders must inform their memberships and government representatives of the urgency to implement the USDA's Master Plan. Last year's outbreaks of foot-and-mouth disease in the United Kingdom and terrorist acts, including the deliberate exposure of humans to anthrax, demonstrate the necessity of having increased and improved capacity to respond. Such action is necessary to safeguard this nation's animal health and trade, and to protect the citizens of the United States of America from food-borne diseases, bioterrorism, and emerging and foreign animal diseases.

# Argentina Launches New Group

By Ernie Zirkle, DVM

In November, I traveled to Argentina to speak to the nation's animal health industry. The meeting, sponsored by the Chamber of Veterinary Industries of Argentina (CAPROVE), was an organizational session to launch an association similar to USAHA.

CAPROVE is an organization of veterinary pharmaceutical manufacturers. Dr. Emelio Gimeno, coordinator of OIE activities for the region of the Americas, extended the invitation to address 102 people from all facets of the livestock industries, including producers, academia, markets and veterinarians.

I presented an overview of USAHA's organization, objectives, operations, committees and working groups and accomplishments. Dr. Vallat, Director General, followed with an outline of how OIE functions.

A follow-up session was devoted to discussion regarding getting started. They elected a president, vice president and appointed 14 people to an executive committee. The group wrote an agenda for discussion as they get organized. The officers of the Permanent Forum of Animal Health (FOPESA) asked to join USAHA and receive all correspondence. I invited the president and/or vice president to attend our St. Louis meeting.

The following morning, a press conference was held to announce the formation of FOPESA. Dr. Vallat and I were the focus of the meeting, along with CAPROVE and the officers of FOPESA. Many speakers pointed to USAHA as the model for their organization.

While in Argentina, I was invited to the grand opening of the expanded Biogenesis S.A. laboratory in Buenos

Aires, making the company the largest producer of foot-and-mouth vaccine in this hemisphere.

*Comment:* The final organizational structure of FOPESA will not closely resemble USAHA, because of differences in culture and the state of animal agriculture in Argentina. Many factors, including severe governmental corruption, have put the country in dire economic stress. However, it was a great feeling to help them form an organizational framework that could help sustain their industry through the stresses of economics, FMD, and government corruption and instability. The Chief Veterinary Officer and his assistant suggested that collaboration between USAHA and FOPESA is essential for the good of the industries of Argentina. I encourage our membership to support this effort in any way possible.

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## BSE Risk-Cont'd

5. USDA will consider disposal options for dead and downer animals.

### Government Programs Crucial

Even if BSE enters the United States, Gray found it would not become established. "With the government programs already in place, even accounting for imperfect compliance, the disease in the cattle herd would quickly die

out, and the potential for people to be exposed to infected cattle parts that could transmit disease is very low," he said.

In simulations, they found that in all cases BSE fails to take hold and dies out, usually within a matter of a few years. Even in the worst case scenarios, the number of additional

animals that might become sick would remain small, and the amount of contaminated tissue entering the human food supply and carrying the agent suspected of transmitting BSE to humans, and causing variant Creutzfeldt Jacob disease (vCJD) would be minute.

The model found that the government control systems in place are critical, particularly the prohibition on rendering cattle parts into feed given to other cattle. This breaks the cycle by which the disease is believed to spread among animals, and keeps any outbreak in check.

Last summer HHS Secretary Tommy Thompson outlined new steps to improve scientific understanding of BSE by incorporating a comprehensive approach to

strengthen further surveillance, increase research resources and expand existing inspection efforts.

Animal and Plant Health Inspection Service (APHIS), with the Food Safety and Inspection Service, has an emergency response plan (in place since 1990) to be used in the event BSE is identified here. USDA has also worked cooperatively with HHS to coordinate response plans. Also, the APHIS Transmissible Spongiform Encephalopathy Working Group monitors and assesses all ongoing events and research findings. APHIS continually revises and adjusts prevention and diagnostic measures as new information is gained.

The Harvard report and information on BSE can be found at [www.usda.gov](http://www.usda.gov).

# First Joint Plenary Session: A Resounding Success

By Pat Blanchard, DVM, P.h.D.

The efforts to host a combined joint scientific session of USAHA and AAVLD met with outstanding success at the November 2001 joint meeting in Hershey, Pa.

A joint meeting of USAHA and AAVLD leadership last year led to a proposed session on selected topics of transmissible spongiform encephalopathies (TSE).

The final result was an unexpected and resounding success that caught even the organizers by surprise when a standing-room-only crowd of approximately 450 people attended, requiring a short break in the presentations to open an adjacent auditorium to seat the overflow.

Session presentations included:

- Species susceptibility to chronic wasting disease agent by Dr. Beth Williams;
- Progress update on validation of the sheep eyelid test and genetic testing by Dr. Katherine O'Rourke;
- Diagnostic testing and the epidemiology of BSE in Europe by Dr. Marcus Doherr and what the United Kingdom's experience might



TSE Symposium presenters: (left to right) Dr. Linda Detwiler; Dr. Beth Williams, Dr. Katherine O'Rourke; and Dr. Marcus Doherr.

predict for the United States and other countries;

- Inactivation of TSE in carcasses by Dr. David Taylor; and
- A report on the United States surveillance efforts by Dr. Linda Detwiler.

Meeting survey respondents from both organizations consistently listed the joint session as one of the three best aspects of the 2001 Annual Meeting. Other changes to both organizations' schedules afforded the

membership of each to attend joint committee meetings and sessions, such as a special session on foot-and-mouth disease.

Topics in the FMD session included epidemiology, diagnostics, research and the role of diagnostic laboratories. Keynote speaker Dr. Joe Brownlie, from England, provided an interesting recap of the disease's spread in the United Kingdom and the lessons learned. This session also exceeded the planned seating capacity of 300 people.

A final note on the meeting from the view of an AAVLD officer and USAHA member: Survey respondents also ranked the joint President's reception dinner as another highlight. AAVLD wishes to thank the officers of USAHA, especially Dr. J. Lee Alley, and David Shaw and John Lawrence of Idexx Corporation, for their generous sponsorship. AAVLD looks forward to utilizing this joint venue in the future to present two Graduate Student Awards and the prestigious Pope Award.



Pictured: (left) Dr. Benjamin Pomeroy and (right) Dr. Bob Eckroade enjoying the Annual Meeting in Hershey.

# Update on EPM Epidemiology

Prepared by Joe Gaydos and Michael Yabsley  
of the Southeastern Cooperative Wildlife Disease Study

Recent research has further elucidated the epidemiology of equine protozoal myeloencephalitis (EPM). *Sarcocystis neurona* now is recognized as the protozoan parasite that causes the majority of EPM cases; however, the closely related protozoans *Neospora caninum* and *N. hughesi* have been isolated in a few cases. There has been some clarification regarding the role of wildlife in the epidemiology of EPM.

Equine protozoal myeloencephalitis is a severe neurological disease of horses. Protozoan parasites invade the central nervous system (CNS) of horses and, together with the corresponding inflammatory reaction, damage the nervous tissue. Clinical signs can vary, depending on the location of the lesion within the CNS. EPM may mimic other equine neurologic diseases, making diagnosis difficult. Similar protozoan neurologic disease also has been reported in cats, dogs, sheep, mink, skunks, raccoons, Pacific harbor seals, and southern sea otters.

The Virginia opossum (*Didelphis virginiana*) is the definitive host of *S. neurona*. Both domestic cats and striped skunks (*Mephitis mephitis*) have been shown to be experimentally competent intermediate hosts, and the nine-banded armadillo (*Dasypus novemcinctus*) has been identified as a natural intermediate host. As with other *Sarcocystis* species, the intermediate host becomes infected with *S. neurona* by ingestion of oocysts passed in the feces of the definitive host; in this case the opossum. The life cycle is completed when the opossum consumes sarcocysts in the muscles of armadillos and skunks and

possibly other unknown species that serve as intermediate hosts. Horses are considered aberrant hosts infected via ingestion of food or water contaminated with oocysts shed by infected opossums. Although several studies have shown large numbers of horses are exposed to the parasite (up to 50 percent prevalence), relatively few horses develop clinical disease. It is believed that the incubation period can be as long as 5 years.

The molecular similarity of *S. neurona* and a closely related species, *S. falcatula*, has confused the search for the causative agent of EPM. At one time, these two species of *Sarcocystis* were believed to be the same protozoan. Recently, molecular and biological characterizations have demonstrated that *S. falcatula* and *S. neurona* are distinct species. Because opossums are the definitive hosts of

both, opossums serve as the primary risk to horses. Although wild birds are involved in the life cycle of *S. falcatula*, the importance of birds in the maintenance of *S. neurona* is uncertain.

Although commercially prepared horse feed is heat-treated and represents a safe source of feed, opossums may contaminate food if allowed access to it after it has been treated. Although the host factors important in the development of clinical disease are unknown, opossums are responsible for the contamination of premises with infectious oocysts. Maintaining an opossum-free facility and preventing exposure of horse feed to wildlife are recommended to prevent EPM.

Article preciously appeared in the SCWDS BRIEFS, Vol. 17, No. 3, Oct. 2001. Archived at [www.scwds.org](http://www.scwds.org).

## Orientation Session a Success

What started as an idea from President-Elect Bob Frost became a reality at this year's Annual Meeting in Hershey. A special session was held to orient new members and first-time attendees to the USAHA. More than 40 people participated in the one-hour session, chaired by Mr. Frost. As well as being a valuable aid to first-time participants, it also served as a refresher course for those who have preciously attended. Several members of the

Executive Committee also attended and offered their insights to the attendees. USAHA's organizational chart was used to describe the functions of each of the components of the association. Further, the open discussion period provided an opportunity for questions about committee membership, resolution activity and responsibilities of the Board of Directors.

If you missed this year's session, look for a similar session at the Annual Meeting in St. Louis.