

COMMITTEE ON BRUCELLOSIS

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The Committee met on Monday, October 3, 2011 at the Buffalo Adam's Mark Hotel, Buffalo, New York, from 1:00 to 6:00 p.m. There were 43 members and 32 guests present. Introductions of Vice-Chairs and Subcommittee Chairs were made. An overview of the 2010 meeting and resolutions were given.

Presentations and Reports

Dr. Walt Cook presented the Scientific Advisory Subcommittee Report, which is included at the end of this report.

Dr. Carter Black presented the Feral Swine Subcommittee Report, which is included at the end of this report.

Dr. Marty Zaluski presented the Greater Yellowstone Area (GYA) Subcommittee Report, which is included at the end of this report.

Moving Forward with the Brucellosis Eradication Program

Dr. Mike Carter

USDA-APHIS-VS

A summary of this presentation on Tuberculosis/Brucellosis Working Group; National Brucellosis Program Update; Brucellosis Slaughter Surveillance; and Interim/Final Rule is included at the end of this report.

Montana Review

Dr. Marty Zaluski

Montana State Veterinarian

On September 23, the National Veterinary Services Laboratory (NVSL) notified MDOL that a *Brucella abortus* biovar 1 was isolated from a cattle herd located in the Designated Surveillance Area (DSA) in Park County. This is the fourth Montana Brucellosis affected herd (cattle or domestic bison) since Approximately 10 adjacent/contact producers with approximately 2,500 test eligible cattle have been identified. While it's too early to speculate on the source of exposure, the affected premises is not within the bison seasonal tolerance zone, while elk Brucellosis in this area is well-established.

Montana made two changes to DSA regulations this year. First, Montana now requires permanent, official identification on any sexually intact cattle leaving the DSA. This helps with traceability of animals that have a low chance of being exposed to Brucellosis. Second, the boundary of the DSA has been adjusted to include an area where Brucellosis in wild elk has been recently documented. This recent adjustment increases the size of Montana's DSA to 4% of the state. All livestock operations within the DSA are required to calthood vaccinate, and Brucellosis test sexually intact livestock 12 months of age or older, prior to being sold or being removed from the DSA. Any variances to these requirements must be done through a herd plan.

Idaho Review

Dr. Bill Barton

Idaho State Veterinarian

A portion of the Brucellosis affected herd identified in late 2009 remains under quarantine pending a release test to be completed in late fall, 2011. Ninety seven (97) head of fall calving cows remain under quarantine. They were last tested in April, 2011 and were all test negative for Brucellosis. They will be retested following calving this fall and if all are test negative, the quarantine will be released. An assurance test will be completed a year from the date of release from quarantine. One hundred eight (108) head of 2010 heifer calves that had also been under quarantine were spayed in June, 2011 and released from quarantine.

On May 1, 2011, the Idaho State Department of Agriculture (ISDA) implemented a temporary rule requiring change of ownership and movement testing of intact cattle 18 months of age and older that leave Idaho's Designated Surveillance Area (DSA). The rule applies to all intact cattle 18 months of age and older that have been within the DSA at any time between January 1 and July 1 of the calendar year. These animals must be tested negative for Brucellosis within 30 days prior to movement unless sent to an approved **Idaho livestock market** or federally approved slaughter facility that will test for Brucellosis on arrival. Idaho State Brand Inspectors are assisting with enforcement of the testing requirements.

The rule also requires that all cattle and domestic bison, regardless of age, that leave the DSA must be identified with official individual identification.

Upon approval by the 2012 Idaho Legislature, these temporary rule changes will become permanent.

The ISDA, in cooperation with the Idaho Department of Fish and Game, and Idaho's cattle producers, continues to work to prevent commingling of cattle with potentially infected wildlife. Several cattle winter feeding areas have been fenced to prevent elk from accessing the feed lines and more projects are planned in the near future. Individual producer herd plans are updated on a regular basis to ensure that appropriate risk mitigation measures are being utilized.

Wyoming Review

Dr. Jim Logan

Wyoming State Veterinarian

Wyoming has found one new affected herd in Park County in the vicinity of our three (3) most recent cases (2 in late 2010 and 1 in February, 2011). The three (3) earlier cases are all known to be caused by transmission from infected wild elk and it is expected that this most recent case will be as well. These cases are not epidemiologically linked except through the elk.

The Wyoming Livestock Board (WLSB) expanded the boundaries of the Designated Surveillance Area (DSA) in April 2011 to include areas adjacent to the previously established boundaries. The expansion was due to an increased seroprevalence in elk in Park and northwestern Hot Springs counties and due to reports of elk/cattle commingling in southern Lincoln county and the need for additional surveillance in these areas.

Wyoming requires calfhood vaccination statewide and all sexually intact female cattle that inhabit the DSA must be calfhood or adult vaccinated. From July 1, 2010 to June 30, 2011, 194,275 head of cattle were vaccinated. The WLSB also has a statewide identification requirement whereby all sexually intact female cattle 12 months of age and over must be officially identified prior to any change of ownership. Additionally, all sexually intact female cattle regardless of age that are in the DSA at any time must be officially identified prior to moving from the DSA.

All female cattle from the Wyoming DSA sold for breeding purposes (regardless of age) and all females over 18 months of age are required to be tested within 30 days prior to change of ownership, movement from the DSA, and interstate movement. Between July 1, 2010 through June 30, 2011, 41,838 animals were tested. Of that number, 32 reactor animals were found in three (3) separate herds through this required testing. We expect to find occasional cases of Brucellosis among our cattle herds as long as there is a wildlife reservoir of the disease in our state. Our test and identification requirements provide good surveillance, traceability, and early detection. The WLSB Brucellosis requirements are well enforced through brand inspection since any change of ownership or inter-county and interstate movements must include a brand inspection clearance.

APHIS has approved Wyoming's Brucellosis Management Area plan.

Depopulation Matrix Draft

Dr. Mike Gilsdorf

National Association of Federal Veterinarians

Presented information on a draft depopulation matrix for Brucellosis that would address availability of funds, risk factors, seroprevalence rate in the herd, presence of abortions or infertility, and source of infection as factors to consider in determining whether depopulation should occur.

Texas' Loss of First Point Testing

Dr. Dee Ellis, Texas State Veterinarian

In 2011 Texas found one confirmed case of *Brucella abortus* in a small cattle herd in deep South Texas. The herd was tested and all trace-ins and trace-outs were completed with no known source detected, and no further spread found. The herd was subsequently depopulated. The herd infection was originally detected by first point testing at a sale barn.

A second herd located in far west Texas disclosed in 2011 was also thought to be infected based upon the epidemiology investigation, however culture was not confirmed. The positive animal was also detected through first point testing at a market. Upon investigation it was determined the cattle were pastured primarily in Mexico. The reactor animal was not vaccinated, and there is little chance of any feral swine exposure. A small number of the herd was tested negative on multiple occasions, but the remainder of the herd continues to pasture on the Mexico side of the Rio Grande. Herds located in remote areas of west Texas along the Rio Grande River continue to pose a disease threat to the Texas livestock industry due to the ease in which they can move between Mexico and Texas.

Texas is in the 3rd year of 5 as a "high risk" state for Brucellosis following receiving "free" status from USDA. Although USDA had committed federal funds to continue to support first point testing for the full five (5) years as a high risk state, because of severe reductions in state funds the Texas Animal Health Commission (TAHC) stopped enforcement of change of ownership testing on August 1, effectively stopping first point testing at markets. Texas historically tested about 1 million adult cattle per year.

Approximately one third of the sale barns in Texas have continued to voluntarily test and/or tag animals. TAHC has rule making underway to require continued tagging of adult cattle, but there are no plans to reconsider the stoppage of testing at markets. TAHC will continue to encourage voluntary testing and tagging of cattle at markets, and will continue to actively investigate all Brucellosis suspect cases found through other surveillance streams.

Consortium for the Advancement of Brucellosis Science

Dr. Walt Cook, University of Wyoming

Background: In 2005 an international group of scientists met in Laramie, WY to examine the needs for Brucellosis vaccines, vaccine delivery and diagnostics and make recommendations for their research and development. The "Laramie Agenda" determined that it would take a minimum of \$10 million and 10 years to accomplish the above; and they further recommended the development of a consortium to oversee this research and development.

Based on this recommendation, the Consortium for the Advancement of Brucellosis Science (CABS) was formed and was designed after USDA NIFA CAP grants as the hope was that CABS would be able to apply for a CAP grant. The USAHA and Dr. John Clifford and others have recommended to NIFA that Brucellosis be included as a potential CAP project. This would not guarantee that a Brucellosis consortium would obtain funding, nor would it guarantee funding for CABS even if Brucellosis were funded, it would simply allow us to compete. To date, no progress for Brucellosis in the CAP program has been made.

Because we do not seem to be making progress with NIFA, CABS is now pursuing funding through an amendment to the Farm Bill. We have been working with legislators to develop draft language for an amendment that would support research consortia for bovine Brucellosis, bovine tuberculosis, and other zoonotic diseases shared by wildlife and livestock.

We are also pursuing potential private or foundation sources of funding. We recognize that we may not be able to obtain the full \$20 million from these sources, so we have broken the research needs into separate phases that could be individually supported (or partially supported). Some foundations are more interested in international disease issues; additionally private companies see a limited USA market but large international market. For this reason, we are considering expanding CABS to also address international Brucellosis issues. We still have several issues to investigate before deciding whether to pursue this expansion.

Mexico Brucellosis Update

Dr. Jose Alfredo Gutierrez, CGRPA, Mexico

The national program of eradication of Brucellosis in animals is regulated by the Federal law on Animal Health and the standard official Mexican 041 "National campaign against Brucellosis in animals", regulation which is currently changing.

The budget of the national program of eradication is nearly 10 million dollars annually, and is aimed at achieving the recognition of regions of low prevalence in cattle, bovine and goats, based on strategies of active and passive surveillance in Sera, monitoring of tanks of milk, surveillance in herds with reproductive problems and

abortions and an outline of test and elimination of positive animals. The program also provides for a significant increase in vaccination against *Brucella mellitensis*.

Currently Mexico boasts the North of the State of Sonora recognized as free and region in search of be recognized first of all with the classification of "Class A" by the USDA APHIS. Also southern regions of Sonora, Guerrero coast, "A" of Campeche and Yucatán and Baja California Sur States are recognized in a stage of eradication.

After the year 2011 the State of Quintana Roo and the regions "A" of the States of Guanajuato, Chiapas and Jalisco will fail its entry to the status of eradication.

Committee Business:

Four (4) resolutions were brought before the Committee.

The GYA Subcommittee brought the following two (2) resolutions:

- A request for assistance from the Centers for Epidemiology and Animal Health to establish a depopulation decision matrix; and
- Reporting on trace investigations of suspect animals.

The Scientific Advisory Subcommittee brought the following two (2) resolutions:

- The use of BAPA and FPA tests for cervids; and
- RB51 calfhood vaccination of bison up to 24 months of age.

All four resolutions passed unanimously.

REPORT OF THE BRUCELLOSIS SCIENTIFIC ADVISORY SUBCOMMITTEE

Chair: Walt Cook, WY

The Subcommittee met by conference call on September 27, 2011.

Members present: Jack Rhyan CO, Valerie Ragan, MD, Don Evans KS, and Phil Elzer LA, Walt Cook, WY

Members absent: Don Davis TX, Steve Olsen IA

Discussions:

a. Western Blot use in cervids

As of today there is no FORMAL charge for the subcommittee to make a suggestion on the use of the Western Blot system. For the past 6 years there have been numerous discussions relative to the use of the test.

Jack Rhyan and Pauline Nol did an experiment where they injected elk with killed preparations of Brucella and Yersinia. The sera from these animals was sent to three different laboratories and the Western Blot assay was used to monitor the animals immune responses. Jack will review the data and he will get back to the subcommittee with his findings. Phil Elzer noted that the work was done on experimentally injected elk not hunter killed samples of which can be problematic in themselves. Wyoming also did a project on elk experimentally infected. That data has been submitted to the committee for review via Mark Drew. The data will be compiled and will be discussed on a later call.

Data evaluated up to this point does not support the use of the Western Blot as a diagnostic test for brucellosis in cervids. For the Western Blot test to be considered an official test it would have to pass with all the vigor as all the other tests for brucellosis. Due to difficulties with running the test (time, antigen supply, interpretations, early data results) there has been no push to make this an official brucellosis test.

b. Resolution on approval of calfhood vaccination of bison up to 24 months of age

There was some confusion as to the status on the recommendation to USDA, APHIS, VS for approval of calfhood vaccination of bison up to 24 months of age that had been discussed in 2009 by the subcommittee. The intent of the committee was to recommend that USDA, APHIS, VS approve the use of calfhood vaccination of bison up to 24 months of age due to the later maturity of bison. A letter was found dated May 25, 2010 to USDA, APHIS VS regarding the recommendation. Dr. Elzer will follow up with APHIS on the status as a follow up to the recommendation. This information was passed on to Dave Hunter (he asked for the resolution) and Deb Donch for review. Deb passed on the information to Arnold Gertonson who will be in Buffalo.

Since an official response to the recommendation letter has not been received, a resolution recommending the change will be submitted to the full brucellosis committee as recommended by Dr. Logan.

c. The use of PCR for the diagnosis of Brucella abortus infection

There is interest in the possible use of PCR in the diagnosis of brucellosis. The comment was made that results of Betsy Bricker's PCR techniques were not reproducible, therefore PCR is not a good diagnostic technique as of yet.

PCR is good in speciation, but didn't work well with tissues or milk. It works well with pure culture, but is not a good diagnostic tool. There is not a good PCR test available currently for use in the diagnosis of brucellosis. PCR only works well if DNA is present. At this time, the data does not support the use of PCR as a diagnostic tool. There is a lot of extrapolation of the use of PCR as a diagnostic tool, but the work has been done on spiked samples, not on clinical samples. It is requested that if anyone on the brucellosis committee has additional data on the PCR test that they would like the brucellosis scientific subcommittee to evaluate, then please send the data in.

d. Adult vaccination and possible titers to CF and FPA

The question has been raised as to whether adult vaccination with RB 51 may cause an occasional titer on the CF or FPA tests. There is some empirical information that apparently some cattle in the Greater Yellowstone Area that were vaccinated with RB 51 as adults may have subsequently had some titers. However, those animals were not tested prior to vaccination so the baseline titers on those animals is unknown. Generally, animals vaccinated with RB 51 do not have titers on the CF or FPA as a result of vaccination. However, there are a few reports of some animals that have become card positive after adult vaccination with RB51. There is speculation that there may be enough O-side chain to cause a titer in a very few animals, perhaps 0.5 to 1% of the animals vaccinated, however data is lacking. There are currently studies ongoing on vaccinated cattle in the Greater Yellowstone Area. It was decided that the data generated by the study should be evaluated and the topic discussed next year.

e. Approval of the FPA and the BAPA as official tests in cervids.

A number of brucellosis serological tests have been approved as official tests in cervids. However, the FPA and BAPA have not officially been approved for use in cervids. The subcommittee evaluated data presented as part of an FPA/BAPA validation project for cervid serology samples tested in Idaho, Wyoming and Montana laboratories.

Based on results of this data, the subcommittee recommends that the BAPA be approved as a screening test for brucellosis in cervids, and that the FPA be approved as a confirmatory test for brucellosis cervids.

The brucellosis scientific subcommittee meeting was adjourned at 2:15 PM Eastern Standard Time.

REPORT OF THE FERAL SWINE SUBCOMMITTEE ON BRUCELLOSIS AND PSEUDORABIES

Co-Chairs: Dr. C. Carter Black, GA;
Dr. Joseph L. Corn, GA

The Feral Swine Subcommittee met with the Subcommittee on the GYA and the Scientific Advisory Subcommittee on Sunday, October 2, 2011. Reports were provided on a number of feral swine issues of interest to USAHA and its members. A summary of the reports is included below.

Strategic Baiting for Emergency Containment of Feral Swine

Kurt C. VerCauteren, USDA, APHIS, WS

Co-Authors: Tyler A. Campbell, David B. Long, Michael J. Lavelle, Kurt C. VerCauteren, Bruce R. Leland, Terry Blankenship

Invasive feral swine (*Sus scrofa*) occur throughout much of the United States where they cause damage to agriculture, property, and natural resources and threaten human health and safety. Additionally, they are susceptible to >30 viral and bacterial diseases and are therefore a major threat to livestock production. Information is lacking on the exposure and infection rates for these diseases in feral swine populations occurring in the Texas border region. This information is needed to understand risks for transmission and to devise and evaluate control strategies such as containing feral swine following an outbreak of such diseases. We evaluated effects of baiting on feral swine movements and corresponding likelihood of disease spread in the presence of real and simulated culling activities. Our objectives were to determine if baiting of feral swine altered areas of utilization, distances from location centroids to treatment location (control or bait station), and movement rates by survivors during culling activities. Our experiment occurred in spring 2011 during which we collared feral swine with GPS collars on the Rob and Bessie Welder Wildlife Foundation (WWF) in San Patricio County, Texas. We established and maintained a bait station on one side of the WWF and conducted population-wide culling activities, including trapping, controlled shooting, drive shooting, and aerial gunning. We determined and evaluated areas of utilization and movement rates using GPS locations to compare home ranges and movements between animals provided with the bait station and those without under various levels of motivation provided by culling activities. We found that not all feral swine in proximity to the bait station used it. Movements of those that did use the bait station appear to have been impacted by the presence of the bait. Based on our results, we cannot recommend baiting as an alternative to fences for containing animals during culling activities. However, bait stations may be valuable for patterning feral swine movements and conducting observations and removals.

Identifying and optimizing prevention and control strategies against the spread of viral pathogens within U.S. feral swine populations

Lindsey Holmstrom a graduate student from the University of California, Davis

Summary: Feral swine populations are dramatically increasing in the U.S. and their distributions are becoming more widespread. Estimates of their numbers are over 4 million, with the majority of feral swine located in Florida, Texas and California. Exotic trans boundary diseases, such as foot and mouth disease and classical swine fever, could be intentionally or non-intentionally introduced into this population and go undetected for prolonged periods of time, self-limit, or become endemic. Our current lack of understanding of those factors that directly influence the local, regional, and national spread and persistence (or, disappearance) of high-consequence viral pathogens within feral swine populations limits our ability to optimize disease prevention and control strategies. The goal of our project is to better understand the role that feral swine might play in propagating or extending an outbreak in the U.S. and the options for control. Since the U.S. feral swine population is largely an unknown ecologic system with respect to disease spread, we will collect data on those factors identified as being crucial toward understanding the spread of viral pathogens in feral swine populations. Our end result will be a high-quality dataset that is extensively analyzed and available to the modeling community to strengthen wildlife modeling efforts for informing policy. Understanding movements and interactions of feral swine over various landscapes and ecoregions and identifying the epidemiologic and ecologic factors associated with disease spread will directly enhance the ability of the DHS, USDA and individual state agencies to prepare for, respond to, and recover from introduction of exotic trans boundary diseases in the future.

Dr. Joseph L. Corn, Southeastern Cooperative Wildlife Disease Study (SCWDS), University of Georgia, provided an update on the National Feral Swine Mapping System (NFSMS). SCWDS produced nationwide feral swine distribution maps in 1982, 1988 and 2004 by working directly with state and territorial natural resources agency personnel. In 1982, 17 states reported feral swine in a total of 475 counties. In 2004, 28 states reported feral swine in 1014 counties. With support from USDA-APHIS-Veterinary Services (VS) the SCWDS developed and implemented the National Feral Swine Mapping System (NFSMS) in 2008. The NFSMS is an interactive data collection system used to collect and display real time data on the distribution of feral swine in the United States.

The real time feral swine distribution maps are produced using data collected from state and territorial natural resources agency personnel and other state/federal wildlife and agriculture agencies. The real time map is available to be viewed by the public on the NFSMS home page. Distribution data submitted by agency personnel are evaluated by SCWDS on a continual basis, and the real time distribution map updated with verified additions on a monthly basis. Feral swine populations and/or sightings are designated either as established and breeding populations, or as sightings, but only established breeding populations are included on the map and in the total of the number of states with feral swine. Currently 37 states are reporting established feral swine populations. Over 450 additions have been made to the feral swine distribution map through the NFSMS since January 2008. The NFSMS is accessed via the internet at <http://www.feralswinemap.org/>. Additional data are provided to state/federal agencies and universities on request.

With no other discussion, the committee adjourned at 4:30 PM.

SUBCOMMITTEE ON BRUCELLOSIS IN THE GYA OF THE COMMITTEE ON BRUCELLOSIS

Chair: Marty Zaluski, MT

The subcommittee met on October 2, 2011 with subcommittee chair, Marty Zaluski, calling the meeting to order at 12:30 PM. The subcommittee meeting was held in conjunction with the Scientific Advisory Subcommittee and the Brucellosis in Swine Subcommittees.

Subcommittee members present included: Terry Kreeger, Chuck Massengill, Jim Logan, Dave Hunter, Bill Barton, Michael Gilsdorf, Neil Anderson and Marty Zaluski. Subcommittee members absent included: Rick Wallen, and John Belfrage, Susan Keller, and Mark Drew.

The subcommittee received a presentation by Neil Anderson on a live capture elk study assessing the exposure rates of elk outside of Montana's Designated Surveillance Area. The study conducted in January of 2010 found 12 elk out of 100 sampled. Tracking collars and vaginal implant transmitters (VITs) were applied to numerous sampled elk and pregnant, seropositive elk respectively. This is the first year of a multi-year study assessing brucellosis in Montana elk.

The subcommittee discussed and approved two resolutions. These included resolutions; (a) requesting the inclusion of a description of unsuccessful traces in quarterly brucellosis epidemiological reports, and (b) requesting technical assistance from the Center of Epidemiology and Animal Health with a decision matrix on management of brucellosis affected herds.

Moving Forward with the Brucellosis Eradication Program

Dr. Michael Carter
USDA-APHIS-VS

Since the publication of the Brucellosis interim rule in December 2010, USDA-Animal Plant Health Inspection Service – Veterinary Services (VS) has been working to transition to the new national bovine brucellosis slaughter surveillance plan. When fully implemented, this change will ultimately reflect a decrease in total slaughter surveillance sample numbers to approximately 3 million slaughter surveillance samples nationwide. Surveillance activities in fiscal year (FY) 2011 reflect this transition.

In FY 2011, approximately 5.3 million head of cattle under the Market Cattle Identification (MCI) surveillance program, reflecting approximately 4.1 million head of cattle tested at slaughter and approximately 1.2 million head of cattle tested at market. This testing disclosed approximately 260 MCI reactors. The resulting epidemiologic investigations identified three of the six brucellosis-affected cattle herds in FY 2011, two in the GYA and one in Texas. All other MCI reactor epidemiologic investigations conducted confirmed negative herds.

Approximately 506,000 additional head of cattle and domestic bison were tested as a result of other surveillance activities. Three of the six brucellosis-affected herds disclosed in FY 2011 were domestic bison herds in the GYA disclosed during testing conducted as part of the State's increased surveillance activities. The primary reasons for testing on-farm or ranch includes testing for movement and sale (~38%), testing associated with MCI reactor investigations and affected herd epidemiologic investigations (~31%), herd certification testing (~22%), and testing for show or exhibition (~8%).

There were approximately 3.9 million calves and approximately 6500 adult cattle vaccinated for brucellosis and there were approximately 2180 brucellosis certified-free cattle herds. Traditionally, Brucellosis milk surveillance tests (BMST) surveillance has been conducted in all commercial dairies a minimum of two times per year in Class Free States. This surveillance activity has been discontinued at a national level for States that have been Class Free for five years or more and do not have brucellosis in wildlife. The limited amount of BMST that did occur in FY 2011 did not disclose any brucellosis-affected herds.

Since July 10, 2009, all 50 States, Puerto Rico, and the U.S. Virgin Islands classified as Class Free for bovine brucellosis. During the fiscal year 2011, national and state surveillance has identified six bovine brucellosis-affected herds. 2 located in Montana, one in Texas and three in Wyoming. However, as a result of the interim rule, there was no loss of Class Free State status due to new provisions.

The interim rule removed the automatic loss of Class Free status in any Class Free State if a brucellosis-affected herd is not depopulated within 60 days or if two or more herds are found to have brucellosis within 24 months. The State can retain its Class Free status if 1) affected herds are maintained under quarantine, 2) an individual herd plan, including a test-and remove schedule, is developed and implemented for each affected herd to prevent the spread of brucellosis, and 3) appropriate surveillance is conducted to detect brucellosis in other herds or species.

The interim rule also removes certain surveillance requirements for States or areas that have been Class Free for 5 or more years and do not have *Brucella abortus* in wildlife. The changes include eliminating the twice-yearly ring testing of dairy cattle herds and the elimination for each State to collect blood samples from 95 percent of all cows and bulls 2 years of age or older. Instead, all recognized slaughtering establishments in such States or areas must agree to participate in slaughter surveillance testing as part of a new national bovine brucellosis surveillance plan. These changes will eliminate redundancies in current slaughter surveillance testing with the goal of shifting resources that have been freed up to the Greater Yellowstone Area.

In order to mitigate the potential risk of transmission of brucellosis from brucellosis affected herds in Class Free States, the interim rule also required any Class Free State with *B. abortus* in wildlife or continued detections of brucellosis-affected herds to develop and implement a brucellosis management plan (BMP) approved by the Administrator. The BMP will; 1) Define and explain the basis for the geographic area identified in the BMP, 2) Describe mitigation activities for both domestic cattle and bison and wildlife within or from the BMP, and 3) Describe epidemiologic assessment and surveillance activities to determine if wildlife populations are affected. BMPs that do not address wildlife must describe epidemiologic activities that demonstrate wildlife populations are not a source of the disease.

VS has begun implementing the National Brucellosis Slaughter Surveillance Plan. The goal of the plan is to conduct slaughter surveillance that represents the national cattle herd and demonstrates to our trading partners the disease-free status of the U.S. domestic cattle and bison herd. It is not intended to replace surveillance in areas where enhance surveillance is considered necessary. The sample collection strategy provides a statistical sampling of approximately 2.9 million slaughter surveillance samples and provides a 95 percent confidence that brucellosis would be detected in as few as one infected animal per one million animals. A more descriptive report titled *National Brucellosis Slaughter Surveillance Plan —June 30, 2011* is available on the APHIS web site at http://www.aphis.usda.gov/animal_health/animal_diseases/brucellosis

Under the new plan, blood samples will be collected from fifteen selected slaughter establishments in thirteen States, representing all regions of the United States. Two establishments are bison-only slaughter plants servicing the GYA. These establishments provide the highest probability of detecting brucellosis where brucellosis is not endemic in the wildlife while maintaining a geographical representation, and minimizing disruption of slaughter establishment operations by sample collection activities. In the VS eastern region, six slaughter establishments selected are located in six different States. Samples from four of six establishments will go to the Kentucky Regional Laboratory. Samples from the remaining two establishments will go to the Florida Live Oak Laboratory. In the VS western region, the nine establishments selected are located in seven States. Samples will be shipped to one of the following four laboratories: 1) Kansas Regional Laboratory; 2) University of California Tulare Animal Health Laboratory; 3) Texas State-Federal Laboratory Division; or 4) Utah Veterinary Diagnostic Laboratory. This plan will be review annual to determine if changes can be made to improve efficiency.

As USDA-APHIS-VS develops new regulations for the brucellosis program in conjunction with the tuberculosis program, we will continue to engage a wide range of stakeholders and other interested parties for input on the proposed strategies, program standards, surveillance plans, and other policy concepts. USDA-APHIS-VS hosted 4 public meeting this past spring to discuss the proposed framework and receive comments. Currently UDSA-APHIS-VS is drafting the regulatory text and the program standards that will accompany the regulations. Both documents will be published together for comments in 2012.