REPORT OF THE COMMITTEE ON JOHNE’S DISEASE

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Vice Chair: Elisabeth A. Patton, WI

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The Committee met on October 11, 2009 at the Town and Country Hotel, San Diego, Calif., from 12:30 -5:30 pm. There were 30 members and 15 guests present. Self introductions were made by all in attendance.

Status of 2008 Resolutions and Recommendations

RESOLUTION NUMBER 4: NATIONAL JOHNE’S DISEASE DEMONSTRATION HERD PROJECT

The National Johne’s Disease Demonstration Herd Project was initiated in 2003 as a long-term project (at least five years) with the objective of validating management tools needed for a science-based National Johne’s Disease Control Program.

Preliminary evidence indicates a reduction in prevalence and incidence of Johne’s disease in the demonstration herds to date, but additional time is needed to complete the project.

The United States Animal Health Association (USAHA) requests that the United States Department of Agriculture (USDA), Animal and Plant Health Inspection Service (APHIS), Veterinary Services (VS) continue to prioritize funding for the National Johne’s Disease Demonstration Herd Project to complete the collection of eight years of data from cooperating herds.

RESPONSE: The U.S. Department of Agriculture (USDA), Animal and Plant Health Inspection Service, Veterinary Services (VS) appreciates the United States Animal Health Association’s interest in the National Johne’s Disease Demonstration Herd Project. Due to budget considerations, VS is setting priorities for all its programs, and some adjustments in program activities are necessary. Regarding the National Johne’s Disease Demonstration Herd Project, we will continue to collect data from herds that currently have less than 8 years of data. Our goal is to continue testing through 2011 until all herds have 8 years of data, reducing the budget by approximately $400,000 each year. However, this funding will depend on the budget set by Congress.

RESOLUTION NUMBER 5: STRATEGIC PLAN FOR JOHNE’S DISEASE

The current Johne’s Disease Strategic Plan was last updated by the National Johne’s Working Group (NJWG) in 2003 to guide the work and efforts of the NJWG and the United States Animal Health Association (USAHA) Committee on Johne’s Disease through 2008. A new five year plan is needed to incorporate significant changes that have occurred in understanding Johne’s disease, its management,
availability and performance of diagnostic testing, state and federal funding and awareness of Johne’s
disease among ruminant producers within the ruminant industries.

The United States Animal Health Association (USAHA) requests that United States Department of
Agriculture (USDA), Animal and Plant Health Inspection Service (APHIS), Veterinary Services (VS)
accept the updated Strategic Plan as approved during the 2008 Annual Meeting.

RESPONSE: The U.S. Department of Agriculture, Animal and Plant Health Inspection Service,
Veterinary Services (VS) appreciates the United States Animal Health Association’s (USAHA) interest in
Johne’s disease. VS accepts the National Johne’s Strategic Plan approved by USAHA at the 2008
annual meeting. VS will develop an implementation plan based on the direction provided in the strategic
plan. We encourage USAHA to reach out to industry stakeholders, as USDA is only one partner in the
updated plan. The efforts of USAHA are needed to engage industry groups and producers to ensure the
success of the National Johne’s Disease Control Program.

United States Johne’s disease Program Updates FY 2009
Michael Carter, National Johne’s Program Coordinator, USDA-APHIS-VS

In 1997, USAHA National Johne’s Working Group (NJWG) appointed a committee to design an
affordable and flexible program based on sound scientific knowledge. The result was the U.S. Voluntary
Johne’s Disease Herd Status Program (VJDHSP). Instead of trying to certify herds free of Johne’s
disease, the VJDHSP provides minimum requirements for a program to identify herds of low risk with M.
paratuberculosis infection. These guidelines are used as a model for the Uniform Program Standards for
the Voluntary Bovine Johne’s Disease Control Program (VBJDCP) approved by USDA-APHIS in April of
2002. The latest revision to the program standards, yet to be published, include reducing the frequency
of risk assessments to every three years, the use of milk ELISA and the guidelines to allow States to
allow DHIA technicians or other competent personnel to collect samples for program herd classification.
Other pending changes including the proposed herd classification structure were discussed by the
program standards committee and have yet to be adopted.

For FY 2009 from States that have reported by September 4, 2009, 49 States had adopted to
VBJDCP or had programs that were considered in compliance with these standards. In FY 2008, the
reported activities includes 450,805 cattle tested by ELISA and 55,859 cattle tested by fecal culture or
PCR, 5,675 enrolled herds (4,282 dairy and 1,393 beef) of which 891 are test negative herds (481 dairy
and 410 beef). Herds enrolled as test negative herds are progressing through to level 4. There are 317
Johne’s program level 1 (159 dairy and 158 beef), 281 Johne’s program level 2 (150 dairy and 131 beef),
64 Johne’s program level 3 (28 dairy and 36 beef), and 229 Johne’s program level 4 herds (144 dairy and
85 beef). This represents a decrease in all categories.

In FY 2009 USDA-APHIS-VS receive $6.8 Million. In FY 2009 VS made the National Johne’s
Demonstration Project a priority and continued funding the data collection in an attempt to see that all
herd enrolled in the project had at least 7 years worth of data. It FY 2010, it appears that level funding
will be received for the National Johne’s disease control program, however with the changing priorities
within USDA-APHIS-VS, the decision was made to end the data collection portion of the National Johne’s
disease Demonstration Herd Project, support data analysis, and to shift the remaining funds to general
State cooperative agreement. This shift is intended to support the shift from the federal funded national
control program to more of a Public/Private partnership.

In the future, USDA-APHIS-VS is looking to bring the Johne’s disease control program into alignment
with the VS 2015 vision. This brings about a shift in the focus by USDA-APHIS-VS maintaining the herd
classification portion of the program while reducing the direct support provided to producers in favor of
that effort being pick up by the State and Industry stakeholders.

National Johne’s Working Group Report
Jamie Jonker, Co-Chair NJWG

The full report is included at the end of this report.

Current Status of the U.S. National Johne’s Disease Demonstration Herd Project
Charles P Fossler, (United States Department of Agriculture, Animal and Plant Health Inspection Service,
Veterinary Services)

The National Johne’s Demonstration Herd Project (NJDDHP) in the United States was initiated to
evaluate the long-term feasibility and effectiveness of management-related practices designed to control
Johne’s disease on dairy and beef cattle operations. The NJDDHP was started in 2003, but final herd enrollment numbers were not reached until 2005. The NJDDHP includes 62 dairy herds and 20 beef herds in 17 states. Current plans are to discontinue sampling of herds after the 2009 study year and concentrate on data analysis only in 2010. Results to date indicate that, for both beef and dairy herds, prevalence of *Mycobacterium avium* subspecies *paratuberculosis* (MAP) in the third, fourth, and fifth years of participation was significantly lower than prevalence during the first year of participation. An analysis using Poisson regression was undertaken to identify areas from the risk assessment most important with regard to MAP prevalence. Among the main areas from the risk assessment (which included calving area, preweaned heifers, postweaned heifers, bred heifers, cows and bulls, and additions/replacements), the calving and preweaned heifer areas appeared to be most important with regard to risk of cattle being MAP-positive. Specific factors within the calving and preweaned heifer areas were further assessed. Among these, high risk scores for multiple animal use, manure soiling of udders and legs, and presence of Johne’s disease clinical or suspect animals in the calving area were associated with a greater risk for cattle to be MAP-positive. These results suggest that management efforts initiated since the beginning of the project have been effective in reducing MAP prevalence. Results also suggest that making sure udders and legs of cows in the calving area are clean, using individual animal calving areas (or allowing fewer animals in the calving area), and preventing Johne’s disease clinical or suspect animals from entering the calving area should receive primary consideration with regard to control of Johne’s disease on dairy operations.

National Veterinary Services Laboratory (NVSL) Approved Laboratory Report

Beth Harris, NVSL

Proficiency panels for Johne’s disease organism detection (culture and direct PCR) were mailed to participants in February, 2009. A total of 64 laboratories, (55 USA laboratories, 9 international; Canada - 6, United Kingdom -1, Ireland -1, Sweden -1) participated in the 2009 Johne’s disease fecal proficiency panel. A total of 52 laboratories participated using Direct PCR; 40 laboratories passed, 2 did not submit results, and 10 laboratories did not meet the criteria for passing. A total of 36 laboratories participated using HEY media; 31 laboratories passed, 3 laboratories did not pass and 2 laboratories did not submit results. Forty-three laboratories participated using liquid media systems. Two laboratories used Bactec 460 with both laboratories passing. Twenty-seven laboratories used ESP with 26 passing, and ten used MGIT 960 with 6 passing.

Fifty-two laboratories participated in the pooling proficiency panel. Twenty-six laboratories used direct PCR with 25 passing and one laboratory not submitting results. Six of 6 laboratories passed using HEY solid media. Twenty laboratories used a liquid media system with all 20 labs passing. Of the laboratories using liquid culture for the pooling proficiency panel, 4 used the MGIT 960 with all passing, and 16 laboratories used the ESP system with all passing.

Test panels for the Johne’s ELISA serology proficiency test were distributed in July, 2009, with 73 U.S. laboratories and 7 international laboratories participating (Canada, Chile, Netherlands, and Northern Ireland). Preliminary scoring of results submitted by October 9, 2009 using the z-score grading scheme, resulted in 84.5% percent of laboratories taking the Prionics ELISA panel received passing scores and 83.3 percent of laboratories taking the IDEXX ELISA panel passing. Final results and re-tests are scheduled to be released by October 31, 2008.

The second milk ELISA proficiency panel was offered and distributed in June 2008. A total of 39 laboratories participated in this panel, with 38 laboratories (97.4%) receiving a passing score. A total of 35 laboratories (100%) passed using the Prionics ELISA test kit, 2 laboratories (100%) passed using the Pourquier test kit, and 1/2 laboratories (50%) passed using another ELISA test methodology.

Johne’s Disease Integrated Program (JDIP) UPDATES

Ken Olson, JDIP

The Johne’s Disease Integrated Program (JDIP), a consortium including over 50 academic institutions, government institutions and organizations provides a coordinated framework and crosscutting collaboration for the conduct of Johne’s related research and outreach. Utilizing these resources, JDIP seeks to shorten the timeline from discovery research to lab and field application of the work. Primary funding is through a USDA CSREES NRI CAP grant, but these funds have been successfully leveraged to expand research efforts. JDIP facilitates Johne’s research through annual competitive grants. The system is working well. The Year 5 RFA resulted in 20 proposals requesting $1.4m in
funding. Following peer review, 10 projects were funded with grants totaling $0.85m. Year 6 RFA proposals are due November 9, 2009. JDIP has two major new initiatives underway:

- The first is a vaccine development project that seeks to identify one or more potential candidates for commercial vaccine development. To date 21 candidates have been received and four other groups have indicated that they will submit candidates. Others are also encouraged to submit candidates.
  - Phase I – the initial round of in vitro screening and data analysis for ~25-30 candidates is to be completed by March ’10
  - Phase II - (~10 best candidates to be evaluated in mice) will be completed by Sept ‘10
  - Phase II – (3-5 best candidates to be evaluated in goats) will be completed by Sept ’11
- JDIP is also leading the development of a set of consensus-based standards for validating and reporting paratuberculosis test evaluation studies. This is patterned after the STARD (Standards for Reporting Diagnostic Accuracy) framework developed for test evaluation in human medicine. Anticipated benefits from this JDIP initiative include:
  - Help in avoiding the use of tests of poor utility that do not improve management decisions or reduce potential public health risks
  - Adoption and use of less expensive tests of comparable accuracy to current tests
  - Design and analysis guidelines for authors and reviewers of relevant grant proposals or applications for test licensure
  - More informed decisions about sample types to be included in repositories developed for use in test validation and comparison studies

Education and Outreach is another major focus for JDIP. Four effort of the past year were highlighted.

- National Dairy Producer Survey – Approximately 16% of the commercial dairy farms in the country were surveyed to identify incentives for and barriers to participation in the Johne’s program. It was found that producers are concerned about and have basic knowledge of the disease. Additional education and program promotion/marketing efforts would be useful.
- An Annual Report on Johne’s Program Education and Outreach Impacts sought to identify and document program impacts not reflected in program statistics. Information was received from 37 states that include 91% of the dairy and 77% of the beef cow-calf operations. It was found that nearly 10,000 participants were reached through 210 meetings, 50,000 pieces of information were delivered and 2,155 Johne’s certified veterinarians are available to work with producers. Milk ELISA testing is growing significantly and is available to DHIA producers across the nation.
- The 2nd New Horizons in Johne’s Disease Control workshop was held in conjunction with the 10th ICP at the University of Minnesota. These workshops, targeted to producers and practitioners, focus on field application of Johne’s research and its value in addressing Johne’s at the farm. Regional workshops may be held in 2010.
- The 3rd Johne’s Interest Group session was held at the JAM (Joint Annual Meeting of ADSA and ASAS). These sessions provide a forum for discussion of the Johne’s program and related efforts as well as discussion of potential enhancements. JDIP anticipates holding its annual conference in conjunction with the 2010 JAM.

More details on JDIP and these efforts may be found on our website www.jdip.org.

Update on new IDEXX Johne’s antibody ELISA test kit
Nevena Djuranovic, IDEXX Laboratories

The new IDEXX Johne’s ELISA is pending USDA approval. An estimated Approval date October/November 2009. IDEXX will replace the USDA licensed HerdChek M.pt Ab ELISA with a new kit. The new IDEXX M.pt Ab Test kit has been available outside of United States for many years, uses proven Institut Pourquier technology and has gained international recognition for excellent performance. The new IDEXX M.pt. ELISA kit has bovine milk, serum and plasma claims. It requires minimal retraining and no additional equipment for customer using the existing IDEXX HerdChek Ab ELISA. All the components, test protocol and result interpretation are very similar to HerdChek M.pt. ELISA as well.

Performance Characteristics vs Culture:
- Milk: Sens. 74.2%, Spec. 99.8%
- Serum: Sens. 51.4%, Spec. 99.3%
- Plasma: Sens. 54.9%, Spec. 100%

Performance vs. Competitor A ELISA
- IDEXX Milk: Sens. 52%, Spec. 98%
- Competitor A Milk: Sens. 44%, Spec. 99%
- IDEXX Serum: Sens. 68%, Spec. 99%
- Competitor A Serum: Sens. 67%, Spec. 99%

Additional benefits: results <2 hours, consistent lot to lot performance, reliable and steady supply from IDEXX.

**Risk Assessment Simulation and Producer Video**
Jeannette McDonald, JDIP

A distance presentation was made of a risk assessment simulation program to be used as a teaching tool for veterinarians and veterinary students in performing on farm risk assessments. A producer version of the simulation is under development.

A preview of a motivational producer video designed to raise awareness about Johne’s disease was shown.

**Current Status of the U.S. National Johne’s Disease Demonstration Herd Project**
Charles P Fossler, (United States Department of Agriculture, Animal and Plant Health Inspection Service, Veterinary Services)

The National Johne’s Demonstration Herd Project (NJDDHP) in the United States was initiated to evaluate the long-term feasibility and effectiveness of management-related practices designed to control Johne’s disease on dairy and beef cattle operations. The NJDDHP was started in 2003, but final herd enrollment numbers were not reached until 2005. The NJDDHP includes 62 dairy herds and 20 beef herds in 17 states. Current plans are to discontinue sampling of herds after the 2009 study year and concentrate on data analysis only in 2010. Results to date indicate that, for both beef and dairy herds, prevalence of *Mycobacterium avium* subspecies *paratuberculosis* (MAP) in the third, fourth, and fifth years of participation was significantly lower than prevalence during the first year of participation. An analysis using Poisson regression was undertaken to identify areas from the risk assessment most important with regard to MAP prevalence. Among the main areas from the risk assessment (which included calving area, preweaned heifers, postweaned heifers, bred heifers, cows and bulls, and additions/replacements), the calving and preweaned heifer areas appeared to be most important with regard to risk of cattle being MAP-positive. Specific factors within the calving and preweaned heifer areas were further assessed. Among these, high risk scores for multiple animal use, manure soiling of udders and legs, and presence of Johne’s disease clinical or suspect animals in the calving area were associated with a greater risk for cattle to be MAP-positive. These results suggest that management efforts initiated since the beginning of the project have been effective in reducing MAP prevalence. Results also suggest that making sure udders and legs of cows in the calving area are clean, using individual animal calving areas (or allowing fewer animals in the calving area), and preventing Johne’s disease clinical or suspect animals from entering the calving area should receive primary consideration with regard to control of Johne’s disease on dairy operations.

**National Johne’s Education Initiative Update**
Teres Lambert, National Institute of Animal Health (NIAA)

A complete report is included at the end of this report.

**Evaluation of Silirum®, a bovine Johne’s disease vaccine, in a calf challenge model**
Terry Bowersock, Pfizer

A summary of the following study was presented.

*American Journal of Veterinary Research*
April 2009, Vol. 70, No. 4, Pages 493-497

**Effect of subcutaneous administration of a killed *Mycobacterium avium* subsp *paratuberculosis* vaccine on colonization of tissues following oral exposure to the organism in calves**
Raymond W. Sweeney, VMD; Robert H. Whitlock, DVM, PhD; Terry L. Bowersock, DVM, PhD; Diane L. Cleary, BS; Todd R. Meinert, PhD; Perry L. Habecker, DVM; Greg W. Pruitt, MEd
Objective—To evaluate the effect of vaccination of calves with a killed *Mycobacterium avium* subsp *paratuberculosis* (MAP) vaccine on colonization of tissues following oral MAP exposure.

Animals—12 healthy Holstein calves.

Procedures—At 14 days after birth, calves received the MAP vaccine (1.0 mL, SC) or saline (0.9% NaCl) solution (1.0 mL, SC [control treatment]). Each calf received $1.2 \times 10^9$ CFUs of live MAP orally 21 and 22 days after vaccination. Prior to vaccination and at subsequent intervals, a blood sample was collected for ELISA detection of antibodies against MAP and for whole blood, antigen-specific, interferon (IFN)-γ–release assay. Nine weeks after MAP challenge, calves were euthanized and various tissue samples were collected for mycobacterial culture. Interferon-γ production in prescapular lymph node cells was measured following in vitro stimulation with MAP antigens.

Results—Calves were seronegative for anti-MAP antibodies at all times. Compared with the findings in control calves, antigen-specific IFN-γ production in circulating lymphocytes and prescapular lymph node cells from vaccinated calves was significantly higher. Culture of tissues from vaccinated calves yielded significantly fewer CFUs of MAP (2,417 CFUs/g), compared with tissues from control calves (15,709 CFUs/g). Furthermore, significantly fewer tissue samples from vaccinated calves yielded MAP in culture (21.8 tissues/calf), compared with findings in control calves (27.6 tissues/calf).

Conclusions and Clinical Relevance—Inoculation of calves with a killed MAP vaccine was associated with reduced colonization of intestinal tissues following experimental exposure to MAP. Use of the vaccine could potentially reduce transmission of MAP to calves in infected herds.

Johne’s Scientific Advisory Subcommittee Report
Suelee Robb-Austerman
This Subcommittee report is included at the end of this report.

Committee Business
Three action items and one resolution were taken under consideration, amended and passed as detailed below.

- Action item 1: The USAHA Johne’s Disease Committee tasks the NJWG to use beef and dairy producer focus groups to identify appropriate strategies to address Johne’s disease and develop a marketing plan based on the information received.
- Action item 2: The USAHA Johne’s Disease Committee will attempt to schedule the National Johne’s Working Group meeting on the same day as the Johne’s Committee meeting for future USAHA meetings.
- Action item 3: The USAHA Johne’s Committee requests approval from USAHA Executive Committee to spearhead the establishment, with representation from other relevant USAHA Committees, of a Working Group on Animal Health Risk Assessment for disease prevention and animal husbandry.
- The Resolution was titled Program Standard Revision with Updated Herd Classification System, and was forwarded to the Committee on Nominations and Resolutions.
Co-Chair Scott Wells opened the meeting with about 60 people in attendance. Report from USAHA Johne’s Committee – Committee Chair Andy Schwartz provided comments on the past meeting of the USAHA Johne’s Committee and an update on USDA’s response to last year’s resolutions.

Treasurer’s Report – Ken Olsen reviewed the NJWG income and expenses from the previous year. On September 30, 2009 the NJWG had approximately $25,000 in available funds.

National Johne’s Coordinator’s Annual Report – Mike Carter (USDA-APHIS-VS) provided the annual USDA Johne’s program update. Consistent with previous years as USDA funding has declined, participant herds in the official program has continued to decline. Johne’s testing has also declined with the exception of more cost effective means including environmental pooling and milk ELISA.

Johne’s funding for FY2010 appears to be flat from FY2009 at $6.9 million. While USDA had initially agreed with funding demonstration herds until 8 years of data collection, demonstration herd funding will be ending with those funds shifted to the State Cooperative Agreements. USDA will also be moving from individual Cooperative Agreements by disease to a single VS Cooperative Agreement covering all diseases.

Private Industry Perspectives

Dairy Cattle Industry – Co-Chair Jamie Jonker provided an overview of Johne’s disease initiatives in the dairy industry. He noted that while dairy herd participation in the official program is around 10%, several recent surveys suggest that nearly 2/3rd of dairy producers are implementing a Johne’s control program. A few individual milk cooperatives and proprietary processors have individual Johne’s control efforts underway. Milk ELISA testing appears to provide an economical and convenient testing opportunity for dairy producers. For a small segment of the dairy industry, the official herd classification program is important for merchandising of genetic stock.

Beef Cattle Industry – Co-Chair Elizabeth Parker provided an overview of Johne’s disease initiatives in the beef industry. The strongest outreach for Johne’s disease control appears to be with seed stock producers. For most beef cattleman Johne’s disease control is conducted as part of overall herd health activities.

Milk ELISA and Dairy Herd Improvement Association (DHIA) – Todd Byrem provided an overview of milk ELISA testing through the DHIA system. DHIA now has 11 labs in the U.S. and two in Canada which run the Milk ELISA test. Additional DHIA associations offer testing conducted through these certified labs. This year, over 250,000 Milk ELISA tests will be conducted with a positive rate of about 6%. Most participating herds conduct testing prior to dry-off, although the test appears to be most sensitive in weeks 2-6 of lactation (prior to peak lactation).

DHIA record processing laboratories are examining opportunities for integrating Johne’s test results with producer management reporting software. This will provide greater opportunities for producers to utilize Johne’s test results for on-farm management decisions including calf management and culling. DHIA has also worked with USDA-AIPL to look at incorporating test results into genetic evaluations. Preliminary results indicate a genetic predisposition to Johne’s and reduced productivity.

Dairy Expo Meeting – Ken Olson reviewed the Johne’s meeting held in conjunction with the World Dairy Expo. The meeting focused on current activities on Johne’s disease being conducted across the dairy industry. Industry activities include producer level efforts from Tillamook County Creamery Association and Organic Valley cooperatives, DHIA activities related to Milk ELISA testing, and genetic evaluation activities from USDA-AIPL and the American Jersey Cattle Association.

AI Industry – Charles Brown reported on perspectives from the AI industry. A.I. companies employee testing of animals (beginning about 12 months of age) prior to animals entering semen collection with positive animals removed. Testing continues throughout the productive life of bulls. A.I. companies provide Johne’s control and prevention information to producers who have a bull tested positive for Johne’s.
Draft Program Standards – Elisabeth Patton reviewed the draft program standards as two parts: immediate changes and Herd Classification System changes. Immediate changes include a new definition for an Authorized Collection Agent, RAMP renewal duration, and the current herd classification changes in Appendix 1 and Appendix 2.

Herd Classification System – Scott Wells reviewed the scientific basis for the new proposed Herd Classification System which provides improved scientific accuracy for defining herd levels based upon true within herd prevalence. Elisabeth Patton then reviewed how these are implemented in the Draft Program Standards. The new proposed Herd Classification System would have 6 levels of quantified risk for Johne’s disease with increased flexibility on testing options to advance to the next level. This increased flexibility allows producers more options in determining how to spend their own dollars in the program. She also detailed how transition from the current system to the new system would occur.

Recommendation: The National Johne’s Working Group recommends that the USAHA Johne’s Committee endorse the Draft Program Standards with the new Herd Classification System.

Small Group Discussion – The session divided into four smaller groups for brainstorming on the future of the Voluntary Johne’s Disease Control Program and the NJWG. The groups reached similar conclusions about the need, in light of decreased Federal funding, for continued growth of the public-private partnership in Johne’s disease control. Herd Classification will remain important for select producers based upon their marketing needs for genetic stock. For most producers, Johne’s disease will remain part of general herd health management. The group noted that best management practices for Johne’s disease have positive implications on general animal health.

Recommendation: The USAHA Johne’s Disease Committee tasks the NJWG to use beef and dairy producer focus groups to identify appropriate strategies to address Johne’s disease and develop a marketing plan based on the information received.

Recommendation: The National Johne’s Working Group recommends that the USAHA Johne’s Committee spearhead the establishment, with representation from other relevant USAHA Committees, a Working Group on Animal Health Risk Assessment for disease prevention and animal husbandry.
The Johne’s disease scientific advisory subcommittee met to discuss the use and interpretation of the direct PCR test for Johne’s disease, primarily in context with the National Johne’s disease program. Field data suggests that agreement between culture and direct PCR is high with moderate and heavy shedding animals, but not with low shedding animals. Preliminary data from 1 study suggests that direct PCR may identify less than 50% of low shedding animals, and can identify a large number of culture negative animals as positive particularly when there are heavy shedding animals in the herd at the time of sampling. While this does not affect the classification of herds within the current program structure, it is problematic for federal interstate movement rules and for States that have movement restrictions on animals classified as positive with an official Johne’s disease test. Suggestions to address this problem included having a suspect range near the cut point, removing direct PCR from the list of official Johne’s disease tests, or keep the UMR rules the same and consider the disagreement between the tests near the cut point an educational issue. The scientific advisory subcommittee will continue to meet and work for a scientific consensus on this issue remotely via the web and email. Interested parties are asked to contact Judy Stable, Judy.Stabel@ars.usda.gov or Suelee Robbe-Austerman, Suelee.Robbe-Austerman@aphis.usda.gov.
National Johne’s Education Initiative Report
Teres Lambert
National Institute for Animal Agriculture

Through a National Disease Eradication Program Grant, the National Institute for Animal Agriculture oversees the National Johne’s Education Initiative and provides professional support to the Johne’s education efforts on a national scope. In line with this effort, NIAA submits an annual work plan that identifies communication strategies and tactics to help educate producers and veterinarians with the ultimate goal of helping to reduce the incidence of Johne’s disease in the United States. The approved work plan is then implemented.

This year’s budget for start-to-finish implementation of all National Johne’s Education Initiative tactics is $50,000.

Communication Tactic #1: National Johne’s Education Initiative Web Site
NIAA maintains and updates the National Johne’s Education Initiative web site and implement tactics to draw traffic to the web site and the information on it. A key tactic is that each news release and collateral piece includes the web site address.

Between April 1 and Sept. 30, 2009, the NJEI web site received 126,846 total hits averaging 217.3 visitors per day. Further research shows that visitors checked out 3.25 different web pages per visit.

Communication Tactic #2: Collateral Pieces, Created 2008
Three brochures were developed in 2008, and these brochures continue to be disseminated upon request. The brochures include a risk assessment prevention and control piece targeting dairy producers, a risk assessment prevention and control piece targeting beef producers and a joint dairy and beef producer brochure about testing for Johne’s disease.

Between Jan. 1 and Oct. 4, 2009, the number of brochures requested and disseminated include:
- Risk assessment prevention and control brochures, beef: 1,272
- Risk assessment prevention and control brochures, dairy: 3,249
- Testing brochures, beef/dairy: 3,821

Funding was used to print 10,000 copies of each brochure, with a second printing funded when supplies were low. Current supplies include:
- Risk assessment prevention and control brochures, beef on hand: 250
- Risk assessment prevention and control brochures, dairy on hand: 1,800

Communication Tactic #2: Collateral Pieces, 2009
One brochure is scheduled to be created in 2009: a 16-page Q&A about Johne’s disease. The draft copy has been written and is with Dr. Carter for his input. The anticipated delivery date for this brochure is mid November.

As with other collateral pieces developed, DJCs and extension specialists will be offered 100 free copies, with additional copies provided at print cost plus shipping.

Communication Tactic #3: News Releases
One news release has been written and disseminated to date to beef-specific and dairy-specific publications as well as general livestock magazines and newspapers and radio. This news release alerted producers and veterinarians to the 2nd New Horizons Workshop in Minneapolis in August.

An attention-getting letterhead using the blue and green NJEI color scheme was designed for news releases. The top element on the page includes the NJEI logo and web site address while the bottom element includes the logos of USDA and NIAA and addresses the NJEI partnership.

Communication Tactic #4: Feature Articles
NJEI started writing and disseminating feature articles that use the byline “T.S. Gatz” last year, and this tactic met with tremendous success. As such this tactic is in place again this year.
Unlike news releases which are perceived as being biased, feature articles are accepted at face value and information is viewed as unbiased since a feature article is written by a journalist rather than a company spokesperson or marketing/advertising agency.

Two feature articles have been written and disseminated this year to dairy publications:
One feature article highlighted Wisconsin dairy producers who lessened their incidence of Johne’s disease after implementing specific management strategies. The second article explained super shedders and the need to test for super shedders—hopefully producers will eliminate super shedders from their herds.

Another feature article is set to be written and disseminated before the end of the year. This article will address the economics of Johne’s disease.

Communication Tactic #5: Dairy Johne’s Disease Newsletter
The newest communication tool implemented to further the reach of information about Johne’s disease, prevention and control practices and testing is a four-page dairy-specific Johne’s disease newsletter.

The dairy Johne’s disease newsletter debuted in July, with the most recent issue published in early October. A third issue will be created and disseminated in December.

Due to limited state budgets and the desire to assist states with their communication efforts, the dairy newsletter has 50 editions per issue:
• One national edition
• 49 customized state editions—same content with change in contact information.

The national edition is disseminated to eight national dairy breed associations, the National Milk Producers Federation (for dissemination to its 31 member cooperatives) and the general press.

Customized state editions are emailed to:
• Respective DJC
• 450-plus State dairy extension specialists and state veterinarians
• 13 state dairy organizations such as Professional Dairy Producers of Wisconsin

Response to the newsletter has been overwhelmingly positive. Recipients report that the newsletter is being forwarded to dairy producers, sometimes printed and disseminated and/or articles are being cherry picked for further use.

The mailing list of the dairy Johne’s disease newsletter is quickly expanding as DHIA staff has asked that they receive the newsletter for dissemination.

Communication Tactic #6: Beef Johne’s Disease Newsletter
The beef Johne’s disease newsletter is similar to the dairy Johne’s disease newsletter but with all articles targeting beef producers. The beef Johne’s disease newsletter debuted in July, with the most recent issue set to go out in mid October. A third issue will be created and disseminated in December.

This newsletter was initiated after learning from a National Animal Health Monitoring System’s study that more than 35 percent of beef producers say they are not familiar with Johne’s disease.

The national edition is disseminated to
• Three national beef organizations: National Cattlemen’s Beef Association, US Cattlemen’s Association and R-CALF
• 15 national beef breed associations
• Several groups post the issue online

The 15 national breed associations have a total reach exceeding 75,000 seedstock producers and include
• American Angus Association
• American Blonde d’Aquitaine Association
• American British White Park Association
• American Chianina Association
• American Gelbvieh Association
• American Hereford Association
• American International Charolais Association
• American Maine-Anjou Association
• American Salers Association
• American Simmental Association
• Braunvieh Association of America
• International Brangus Breeders Association
• North American South Devon Association
• Red Angus Association of America
• Santa Gertrudis Breeders International

To provide communication tools that meet national objectives while helping states that have limited budgets with their outreach efforts, customized state editions of each beef Johne’s disease newsletter are created and disseminated as well
• 49 customized editions for individual state DJCs
• 44 customized editions include Beef Quality Assurance coordinator contact info in addition to the state-specific DJC contact info

Communication Tactic #7: Interact with Media, Attend Producer Events
NJEI staff person serves as the contact person for the media and directs the media to appropriate sources as needed.

Events attended to date in 2009 include the National Cattlemen’s Beef Association, World Dairy Expo and 2nd New Horizons Workshop. Attending allows NJEI to interact with producers, learn more so needs can be met and disseminate brochures.

Projects Underway, Planned
Three projects will be undertaken and finalized by the end of the year:
• Feature article on economics of Johne’s disease
• Feature article, beef-specific
• 16-page Q&A brochure
  ▪ Anticipate November print date
  ▪ Offer 100 free to each DJC
  ▪ Offer 100 free to veterinarians, state dairy and beef extension specialists
  ▪ Disseminate free upon request from producers
  ▪ Additional copies available at print cost + shipping

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