NATIONAL JOHNE'S EDUCATION INITIATIVE

Johne's Disease – Beef

Volume 2, Number 2 Fall 2010

A cooperative effort of the National Institute for Animal Agriculture, USDA, APHIS, Veterinary Services, in association with the National Johne's Working Group & United States Animal Heath Association

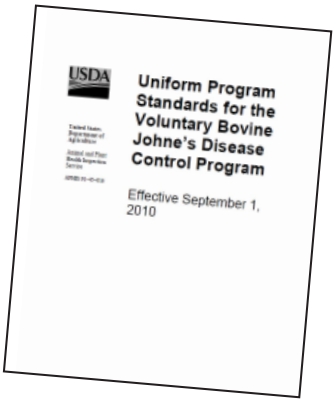
Voluntary Bovine Johne's Disease Control Program Revised, Has 3 Components: Education, Management, Testing

Beef producers and their veterinarians are encouraged to check out the revised Uniform Program Standards for the Voluntary Bovine Johne's Disease Control Program developed by USDA in conjunction with the U.S. Animal Health Association that went into effect Sept 1. The good news for producers and veterinarians is that the updated Control Program is less cumbersome, has three levels of producer involvement and has an easier-to-understand-and-follow system for classifying herds that have a lower risk of transmitting *Mycobacterium avium* subspecies *paratuberculosis (MAP)*, the bacteria known to cause Johne's disease.

"All producers participating in the revised Voluntary Bovine Johne's Disease Control Program will start with the education component, then they can choose whether to proceed to the management component that incorporates best management practices or move on to the classification component that incorporates best management strategies and testing," states Dr. Michael Carter, National Johne's Disease Control Program Coordinator, National Center for Animal Health Programs, USDA-APHIS-VS. "This is a progressive program, and producers can determine their level of involvement. The more producers know about and test for Johne's disease, the better for them and their customers."

When asked why beef producers should participate in the Voluntary Bovine Johne's Disease Control Program, Dr. Carter stressed that the incidence of Johne's disease in beef herds can be reduced significantly when producers know about Johne's disease and implement measures—including testing—to reduce the transmission of *MAP*. He pointed out that Johne's disease is estimated to be present in eight out of 100 U.S. beef herds—and is known to be higher in certain states. Beef cows clinically infected with Johne's disease produce less milk resulting in lighter calves at weaning, and infected cows can be slower to breed back.

"The most significant change in the updated Voluntary Bovine Johne's Disease Control Program is the new six-level testing classification system," adds Dr. Elisabeth Patton, chairman of U.S. Animal Health Association's Johne's Disease Committee. "Producers who participate in the testing component of the Program will find a new six-level classification system that has specific criteria for different sizes of herds: 1-99 head, 100-199 head, 200-299 head and more than 300 head. A significant amount of thought and work went into the development of this new six-level classification system to address concerns with the previous system and to improve the accuracy of herd classification."


USDA

Uniform Program Standards for the Voluntary Bovine Johne's Disease Control Program

Effective September 1, 2010

The revised Uniform Program Standards for the Voluntary Bovine Johne's Disease Control Program—September 2010 can be read in full and printed off at *www.johnesdisease.org*.

Condensed, Producer-Friendly Booklet Available

A 16-page reader-friendly abridged version of the recently revised Uniform Program Standards for the Voluntary Bovine Johne's Disease Control Program has been developed by the National Johne's Education Initiative and underwritten by the Wisconsin Department of Agriculture, Trade and Consumer Protection. Like the full version, this booklet is available online. A personal copy of the abridged booklet can also be obtained from your State Designated Johne's Coordinator or from the National Institute for Animal Agriculture by calling (719) 538-8843.

USDA

This e-newsletter is brought to you by the National Johne's Educational Initiative funded by USDA/APHIS/VS and managed by the National Institute for Animal Agriculture. Editor: Teres Lambert. To learn more about Johne's, visit ***www.johnesdisease.org***.

NATIONAL INSTITUTE FOR ANIMAL AGRICULTURE

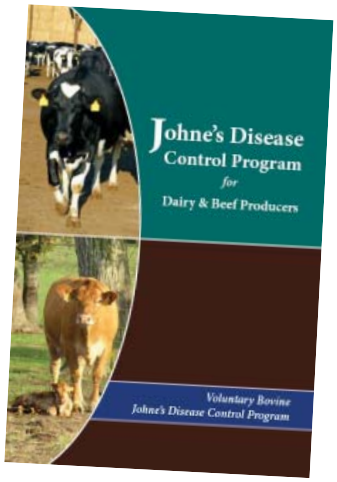
Voluntary Bovine Johne's Disease Control Program: Producer Decides Level of Involvement

Here's a quick look at the three components—Education, Management: Best Management Practices and Herd Testing—that comprise the recently revised Uniform Program Standards for the Voluntary Bovine Johne's Disease Control Program that went into effect in September.

Each producer can decide his/her level of involvement in the Voluntary Bovine Johne's Disease Control Program:

- Education component only
- Education and Management components only
- Education, Management and Testing without Herd Classification
- Education, Best Management and Testing to obtain a Herd Classification Level

A16-page reader-friendly abridged version of the recently revised Uniform Program Standards for the Voluntary Bovine Johne's Disease Control Program is available free to producers and veterinarians. To receive your copy, go to www.johnesdisease.org or call the National Institute for Animal Agriculture at (719) 538-8843.



Education Component

"The more you know about Johne's disease, the better you can prevent and/or control the disease. Thus, all producers who participate in the Voluntary Bovine Johne's Disease Control Program start with the Education Component," states Dr. Elisabeth Patton, chairman of U.S. Animal Health Association's Johne's Disease Committee.

Dr. Patton explains that, during the Education Component, producers will learn basic Johne's disease information such as the cause, clinical stages, transmission, etc. The Education Component of the Program also focuses in on management strategies related to manure and waste, colostrum and milk, calves and young stock, herd additions and high-risk animals, biosecurity, infected animals, control and testing strategies, testing options, test interpretation and using test results. State program components are also discussed.

The educational part may be delivered through classroom settings, one-on-one sessions or online training courses provided by your State Designated Johne's Coordinator (DJC). The method of delivery is determined by the State DJC and what is available in a particular state.

"A number of resources are available to increase one's understanding of this disease," Dr. Patton adds.

Management Component

The Management Component of the Program recognizes beef producers who implement specific management practices to control the introduction and/or spread of MAP, the bacteria known to cause Johne's disease.

To participate in the Management Component, a producer must start by having a Johne's Certified Veterinarian or a trained State or Federal animal health official conduct an on-farm risk assessment to identify management practices and facility issues likely to introduce or spread MAP throughout the herd. A copy of the risk assessment must then be submitted to the producer's state Designated Johne's Coordinator for review.

The second "must do" item is for the producer to partner with a Johne's Certified Veterinarian or a trained State or Federal animal health official to develop a herd management plan—together these are known as a Risk Assessment and Management Plan or RAMP— to minimize the spread and/or introduction of MAP in the herd. A copy of the management plan must be submitted to the producer's state Designated Johne's Coordinator for review and approval.

During Part 3 of the Management Component the producer must implement Johne's disease Best

Management Practices identified and outlined in the herd management plan.

To continue in the Program, the producer and a Johne's Certified Veterinarian must then review and update the Risk Assessment and Management Plan—RAMP—at least every three years after enrollment and make appropriate changes to the herd management plan as needed. The updated RAMP must be completed and submitted to the producer's state Designated Johne's Coordinator during a window of 60 days either side of the original RAMP anniversary date.

"Individual animal or herd testing for Johne's disease at this level of participation in the National Johne's Disease Control Program is optional," Dr. Patton states. "During the initial and renewal RAMPs with your certified Johne's veterinarian, however, I would strongly encourage producers to discuss whether Johne's disease testing is right for their herd."

Producers participating in the Management Component of the Program are required to have all cattle individually identified with ear tags and are asked to implement minimum biosecurity measures to help reduce exposure to manure or milk from cattle of unknown Johne's disease status. Minimum biosecurity measures include:

- Maternity calving areas should be kept clean, dry and free of manure. Individual calving pens should be utilized. If individual calving pens are not used, then cow density should be minimized. The maternity/calving area should not house non-calving or sick animals, nor should it be immediately adjacent to mature animal housing areas.
- Pen and/or pasture density of cow and calf pairs post-calving should be minimized as much as possible.
- If colostrum is bottle fed, it should be from an identified, low-risk, test-negative cow or be a suitable quality colostrum replacer.
- Weaned replacement animals should be raised physically separated from older animals.

- Animals added to the herd should come only from classified or documented low-risk sources. Unless a producer has evidence to the contrary, herd additions should be managed as higher risk animals and the source of the additions recorded.
- Manure contamination of feed, water, equipment and vehicles should be minimized.
- Clinical suspects should be segregated, tested and removed from the herd as soon as possible. Official test-positive cattle should be humanely euthanized or sent to slaughter.

Testing for Non-Classification Purposes

Dr. Michael Carter, National Johne's Disease Control Program Coordinator, National Center for Animal Health Programs, USDA-APHIS-VS, says approved testing methods that can be used to determine the presence or absence of MAP within a beef herd include USDA-approved ELISA testing on serum, MAP detection tests include fecal culture, fecal direct PCR and/or pooled fecal sampling with manure samples are collected from individual animals, then pooled in groups of five. A chart listing the recommended test regimen for the detection of Johne's disease in beef cattle based on herd type and testing purpose is provided in the 16-page abridged version of the Program.

Testing for Classification Program

Herd Testing for Classification is the highest level of the Voluntary Bovine Johne's Disease Control Program.

"Herd testing for classification helps you identify the risk of Johne's disease within your herd based upon the level of infection identified by testing," Dr. Patton states. "The higher the Classification level, the lower the risk for transmitting Johne's disease.

"Therefore, you can use your Classification Level to communicate your herd's level of risk of Johne's disease."

To participate at this level, a producer must participate in the Program's Education and Management components, maintain a current approved Risk Assessment and Management Plan (RAMP) and test for Johne's disease to determine the herd's test status and to establish a herd classification.

Testing methods that can be used to determine the presence or absence of MAP within a beef herd include USDA-approved ELISA testing – serum, MAP detection test: fecal culture, fecal direct PCR and/or pooled fecal sampling with fecal samples collected from individual animals then pooled together in groups of five. Testing samples must be collected by, or under the supervision of, an accredited veterinarian, animal health official or authorized agent, with all samples submitted to a National Veterinary Services Laboratories-approved laboratory.

"The Program has pinpointed minimal testing numbers for herd classification that are dependent on herd size," Dr. Patton states.

Minimal testing numbers, along with testing/sampling requirements are provided in the full version of the revised Uniform Program Standards for the Voluntary Bovine Johne's Disease Control Program and in the 16-page abridged version of the Program.

Both documents also contain a chart detailing the maximum percentage of positive animals in a herd possible to achieve each of the six Classification Levels for the various herd sizes: 1-99, 100-199, 200-299 and 300 head or more.

"As with the previous version of the Program, no level of classification certifies a herd as free from Johne's disease infection," Dr. Patton adds. "We simply have herds with less risk.

"That said, what an achievement it is when a herd owner can make the claim that his or her herd has reached Classification 6 level—the highest level in the Program."

Why Participate in Program

Participating in this national program is designed to help producers improve their understanding of Johne's disease and its impact on their bottom line, learn and implement Best Management Practices that can help prevent and control Johne's disease in their herd, prevent the spread of Johne's disease to their customers' herds and have the opportunity to achieve a Classification Level that shows their customers their commitment to helping prevent and control the spread of Johne's disease to their customers' herds.

"These are definitely four good reasons why a producer should participate in the Voluntary Bovine Johne's Disease Control Program," states Dr. Elisabeth Patton, chairman of U.S. Animal Health Association's Johne's Disease Committee. "Producers will achieve a lot even if they choose to only participate in the education and management components, but adding testing gives you additional information that can be used to help control this costly disease."

If you would like to learn more about participating in the Voluntary Bovine Johne's Disease Control Program, please contact your state Designated Johne's Coordinator. A list of state DJCs is available online at *www.johnesdisease.org*. Your state DJC can also provide you with the full Voluntary Bovine Johne's Disease Control Program document or with the abridged version.

"The more you know about Johne's disease and implement Best Management Practices and testing, the greater the opportunity for a healthier bottom line," Dr. Carter summarizes.

For information about Johne's disease, contact your Designated Johne's Coordinator Elisabeth Patton,
Elisabeth.patton@wi.gov,
Ph (608) 224-4891
or your Beef Quality Assurance Coordinator John Freitag,
jwf@beeftips.com, **Ph (608) 833-7177.**

This e-newsletter is brought to you by the National Johne's Educational Initiative funded by USDA/APHIS/VS and managed by the National Institute for Animal Agriculture. Editor: Teres Lambert. To learn more about Johne's, visit ***www.johnesdisease.org***.