

Animal Health News

Veterinary News from the North Dakota State Board of Animal Health

Winter 2013

Board News

New member

Gov. Jack Dalrymple has appointed Kristi Doll of New Salem as the dairy industry representative on the State Board of Animal Health (BOAH). Doll and her husband, Mark, own and operate Doll's Hill Dairy in Morton County. She succeeds Nathan Boehm of Mandan, who served on the board for two seven-year terms.

E-mail updates

Veterinarians wishing to receive timely information regarding disease situations can sign up for periodic e-mail updates from the Board of Animal Health. To get on the list, contact tcolley@nd.gov, or call (701) 328-2655.

Next Meeting

The next regular meeting of the North Dakota State Board of Animal Health will be at 9 a.m. on **Wednesday, March 13** at the Dakota Zoo in Bismarck.



A note from the State Veterinarian: Health Certificates - Their Role in Traceability and Animal Health

When I began working for the State Board of Animal Health 15 years ago, a major topic at almost every national animal health meeting was the need to improve the traceability of animals. It has remained an ongoing and often controversial topic at local, state and national meetings.

Animal health officials and industry leaders recognized that successful animal health eradication programs, especially the brucellosis eradication program, were a vital part of traceability. The orange identification tags associated with the brucellosis vaccination program were often included on interstate certificates of veterinary inspection or captured at slaughter plants when blood or tissue samples were taken. The tags were in the animals' ears and could be used to help trace animals when needed. As the eradication program helped states achieve "brucellosis-free" status, USDA and other trading partner states required less testing and preventative vaccinations. This resulted in less tagging of animals and at the same time, provided exemptions for animals moving between disease-free states. In most areas, traceability seems to be inversely proportional to the percentage of brucellosis-vaccinated animals.

The official identification requirements for interstate movements in the Code of Federal Regulations were and still are targeted at animals that are considered higher risk breeding age animals.

The recently published disease traceability rule helps address existing gaps in identification for interstate movements only. States are left to determine how best to trace animals within their borders. Through traceability exercises with USDA-APHIS Veterinary Services, other state animal health officials, brand inspectors, local auction markets, and North Dakota veterinary practitioners, we are identifying weaknesses in our system. Results have been encouraging, but even a minimal number of holes in traceability during animal health emergencies or disease traces are never considered acceptable.

The North Dakota Board of Animal Health has requirements in place for official identification on all sexually intact cattle, as well as other species of domestic and nontraditional livestock, entering the state. Certificates of veterinary inspection are only as good as the information on them and the quality of inspection by the signing veterinarian, but historically, they have proven extremely valuable in disease investigations. When health certificates and official tag numbers are coupled with other forms of identification, including brands, breed registration tattoos and producer tags, they can help minimize the spread of animal diseases and resulting economic losses.

Continued on page 2

Johne's Disease

by Jesse Vollmer, Assistant State Veterinarian



'Tis the season when snow melt, slop, concentration of cattle, and messy lots appear, leading to increased transmission of Johne's disease in those herds where the bacterium is present. Before one starts to point the finger at those afflicted as being bad managers, remember there is a

limit to what one can do when in a battle with Mother Nature.

The federal Johne's disease control program is no more and what were standards will likely soon become guidance documents. The budget for the new federal fiscal year has no more line items for specific diseases and cooperative agreements are now commodity-based (not disease specific), so we are left to triage how to best protect the animals of the state with fewer federal dollars and dramatic changes to the way animal diseases are being handled.

The good news is research continues on advanced testing platforms, some of which are a ways down the road but could be quite useful when they come to market. Interest from the marketplace drives these things.

Research is also ongoing into new vaccine technologies. Though not all vaccine research is focused strictly on Johne's, some is focusing on other intracellular pathogens. This means extrapolation could take place but it may be a while before marketable products are available.

While there are limited resources for beef demonstration herds in the Johne's program, some good information continues to be compiled out of the studies. Texas A&M has reported lost dollars per calf of infected cow and has it broken down by the various levels of infection. As soon as we have access and permission, we will try to get at least the abstract up on our website: <http://www.nd.gov/ndda/disease/johnes-disease>.

On a side note as we look through many of the test results, it is quite evident the bad winters of 2009 and 2010 led to conditions that helped the spread of Johne's within herds with shedding animals.

As we continue to try to do more with fewer dollars, we may need to rethink some of the things that we are currently doing with animal health. Unfortunately, everything runs downhill and more of the responsibility will likely fall back to accredited veterinarians and producers.

Questions regarding the Johne's disease program should be directed to Dr. Jesse Vollmer at (701) 328-2612.

Continued from page 1

Traceability is just one component of animal health. Most illnesses and death losses can be prevented through sound vaccination programs, good nutrition and anthelmintic programs, and implementation of basic biosecurity practices. Appropriate vaccine use and management practices certainly have great benefits, and dramatically improve the welfare and productivity of animals.

The proposed animal disease traceability rule does no more than to improve our basic traceability capabilities in interstate commerce through use of the interstate certificate of veterinary inspection. Traceability within our state is already being accomplished by most producers through sound business management and recordkeeping practices. Development of more efficient means of capturing, storing and searching data will be an ongoing effort in our office.

With changes in national animal health programs and increasing public demand for traceability of animals and products, we need to stay focused on the basics. As one of my favorite professors cautioned graduates, "Above all, do no harm." As we serve the public, we always keep that in mind.

Susan Keller

ND State Veterinarian

Disease updates

Reportable diseases

The North Dakota reportable disease list is available on our website at <http://www.nd.gov/ndda/files/resource/Reportable%20Animal%20Disease%20List%20%2012-8-09.pdf>. Anyone who suspects that animals are infected with a reportable disease should immediately contact the state veterinarian.

Disease Surveillance

Veterinarians should remain on the lookout for potential foreign animal diseases, other reportable diseases and especially any vesicular lesions. Please contact either the state veterinarian or the federal area veterinarian in charge (AVIC) if any of these conditions are noted. The State Board of Animal Health has limited funds to help with diagnostic costs associated with unusual disease situations. Veterinarians who have such a case should contact us at (701) 328-2655 to see if funds are available.

Avian Influenza Surveillance

The Board of Animal Health continues to collect samples for avian influenza (AI) surveillance. There is no cost for the testing. Contact has been made with many domestic and non-traditional bird producers, backyard flock owners, and bird exhibitors. More than 3,500 samples have been submitted. No low or high path AI cases have been identified. Funds may be available to assist with diagnostic workups involving domestic or non-traditional birds.

General information about avian influenza with links to other AI websites can be found on the BOAH website: <http://www.nd.gov/ndda/disease/avian-influenza>.

Brucellosis

All 50 states are now considered free of brucellosis in domestic animals. Because the disease is found in wildlife populations of the Greater Yellowstone Area, North Dakota continues to require brucellosis testing prior to importation for animals originating from certain areas in Montana, Wyoming and Idaho. Brucellosis testing is also required for all cattle from Texas.

CWD

Since 1998, more than 9,400 farmed deer and elk have been tested for chronic wasting disease in North Dakota. To date, no samples have tested positive for the disease. The North Dakota Game and Fish Department has tested more than 25,000 wild deer and elk. In March 2010, the

first case of CWD in North Dakota wildlife was identified in an adult mule buck in southwestern Sioux County. Since then, two more wild deer from the area have also tested positive.

Trichomoniasis

Most western states now have regulations regarding trichomoniasis. In most states, the regulations only apply to mature bulls, but some states do have regulations regarding young bulls as well as breeding females. Some states require tests for intrastate movement as well as interstate movements. Standardizing the requirements has been discussed among the states, but consensus has not been reached. North Dakota requires that prior to importation, all non-virgin bulls and any bull over 24 months of age test negative to one PCR trich test or three consecutive weekly cultures. Exemptions may be made for exhibition or seasonal grazing with no comingling. There is no exemption for bulls intended for feeding. Restrictions on the importation of open cows were implemented this past year. Non-virgin female cattle that are not confirmed bred can only be imported if they are to be restricted to a confinement facility for feeding and slaughter purposes only.

Rabies

Rabies numbers almost quadrupled in 2012 with 75 reported cases compared to 20 cases in 2011. The positive animals included 49 skunks, 13 cattle, six cats, four horses, two bats, and a sheep.

Rabies vaccination must be administered according to label directions. Any deviation from label directions and from the recommendations in the Compendium of Animal Rabies Control from the National Association of Public Health Veterinarians may not be supported legally. The complete document, including recommendations for animals that have been exposed to a rabid animal, can be found at: www.nasphv.org/Documents/RabiesCompendium.pdf.

The Centers for Disease Control also has extensive information for veterinarians at: www.cdc.gov/rabies/specific_groups/veterinarians/index.html.

North Dakota State Board of Animal Health

For more information on these and other topics, please contact us:

Office: (701) 328-2655 | Toll Free: 1-800-242-7535
Email: doa-bah@nd.gov

Truck Rollovers

North Dakota has experienced an upswing in truck rollover accidents involving livestock in recent years. These accidents often occur at night and during periods of inclement weather.

The state veterinarian's office, local law enforcement, fire and rescue squads, local veterinarians, the North Dakota Highway Patrol, and the North Dakota Stockmen's Association work together in responding to these incidents. In accidents involving livestock from Canada, the USDA-APHIS Veterinary Services office is also involved.



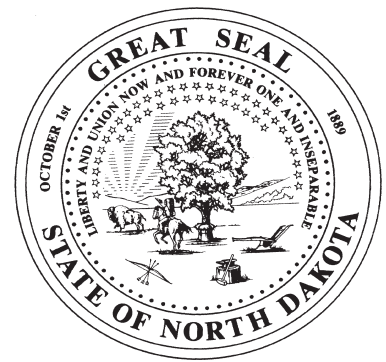
When informed by State Radio of an accident, the state veterinarian will contact a local practitioner to assist law enforcement and local fire departments in responding to the accident. Law officers appreciate having a veterinarian on site for advice on animal care and possible euthanization. In most cases, the trucking company's insurance will cover the costs of the veterinarian's response.

It is important to resist the urge to get the animals off the trailer immediately. The safety of those involved in the accident, passing motorists and responders is the highest priority and should be addressed before attending to the animals.

Set up a containment area before intentionally opening the trailer. If the trailer must be cut open, it is best to cut from the bottom up to prevent animals from walking on a slippery surface. If possible, have stock trailers in place to reload the animals as they come off of the trailer. Ideally, animals from accidents should not be mixed with or have fence line contact with North Dakota animals. Animals traveling through the state or to slaughter may not meet North Dakota's importation and testing requirements.

Advance planning with local law enforcement, fire and rescue squads, and local emergency managers will prove helpful when truck rollovers occur. The plan should include sources of cattle panels for containment and trailers for transport, a designated location where livestock can be held until shipment, a list of producers willing to assist, and procedures for carcass disposal.

Contact the state veterinarian's office for more information at (701) 328-2655.



Animal Health News

is published by

THE NORTH DAKOTA STATE BOARD OF ANIMAL HEALTH

Melvin Leland, Sidney, MT
President

Dr. William Tidball, Beach
Secretary

Kristi Doll, New Salem
Dr. Morgan Dallman, Beulah
Daryl Dukart, Dunn Center
Joel Olson, Almont

Dave Pearson, Hettinger
Shawn Schafer, Turtle Lake
Dr. Kenneth Throlson, New Rockford

THE NORTH DAKOTA DEPARTMENT OF AGRICULTURE

Doug Goehring
Agriculture Commissioner

Dr. Susan Keller
State Veterinarian
skeller@nd.gov

Dr. Beth Carlson
Deputy State Veterinarian
bwcarlson@nd.gov

Dr. Jesse Vollmer
Assistant State Veterinarian
jlvollmer@nd.gov

Please send all correspondence
to the State Veterinarian
Animal Health Division
N.D. Department of Agriculture
600 E. Boulevard Ave., Dept. 602 Bis-
marck, ND 58505-0020
PH: (701) 328-2655
(800) 242-7535
Fax: (701) 328-4567
www.nd.gov/ndda

Antibiotic Use

By Beth Carlson, Deputy State Veterinarian

At a recent symposium on antibiotic use in food animals, one of the keynote speakers started his presentation by saying, "If you think you understand antimicrobial resistance, it hasn't been explained to you properly."

Having been trained by the great Dr. Mike Apley of Kansas State University and after attending multiple seminars on the topic, I have to agree with him. I'm learning the true meaning of the saying, "The more you know, the more you know that you don't know." That said, I've gathered some of the key messages from the symposium to provide some food for thought:

- Antibiotic resistance will never go away and we'll never "win." Resistance will always prevail. Antibiotics are just another evolutionary challenge that bacteria face. We must also evolve. Antibiotics provide selective pressure.
- Resistance is a gradient; it isn't black and white.
- Resistance is related to total use not just misuse. It is estimated that antibiotics have increased human life expectancy by ~7 years.
- In the '60s and '70s, the golden age of antibiotics, the era of infectious diseases was thought to be over. Disease control, prevention and sanitation were de-emphasized.
- Resistance is a wicked issue, meaning it is a problem that traditional methods don't/can't solve and is complex or tangled, not binary ... likely the symptom of another problem.
- Perhaps we should view antibiotics like energy – a limited, valuable resource for which we must continually look for new and varied sources.
- We must find common ground and suspend reactions, emotions, and mistrust. Separate facts from perceived facts: we prefer to believe what we believe is true.
- Antibiotics are societal drugs in that use in one patient can compromise their use/effectiveness in another. We must employ "antibiotic stewardship", which means not only limiting inappropriate use but also optimizing antibiotic selection, dosing, route, and length of administration.
- Antimicrobials are used in plant agriculture also, regulated by EPA ... primarily streptomycin in apple and pear orchards, and oxytetracycline in peach orchards, but total use is estimated to be <1% of total US antibiotic production. That said, use estimates for



all purposes are extremely difficult to come by and are of questionable accuracy.

- "Hit hard and hit early" used to be the mantra but doing so may select for resistant populations more so than the use of older, less aggressive drugs.
- Prior antibiotic use is always a risk factor for drug resistant infection.
- Low doses for growth promotion are less likely to wipe out normal flora and therefore may be less likely to lead to resistance.
- Some resistance genes of today have been found in samples of permafrost from 30,000 years ago.
- Studies have not shown increased resistance in herds with higher levels of antibiotic use but have shown resistance to be age-dependent. Resistance levels will be highest in the youngest animals on the farm.
- It's not a blame game. We need to understand the impact of different uses. Ag needs to stop being defensive that animal use does/doesn't have an impact. Human medicine needs to recognize the difference in how animals are raised. Environmental use has an impact too.
- Over the last 15 years, regulatory requirement costs for pharmaceuticals have increased by 150 percent and development time has increased by 4.5 years. Defensive Research and Development absorbs 20 to 35 percent of resources.
- The top six human drugs have more value individually than all animal health drugs combined.

Scrapie

USDA and the sheep industry continue to work toward scrapie eradication. The most recent scrapie flock investigation in North Dakota was in 2007. To help in the eradication effort, we are being asked to increase on-farm and market surveillance. Limited funds are available through March 31, 2014, to compensate those submitting samples. Please contact us at (701) 328-2655 or doa-bah@nd.gov if you have sheep that may qualify.

Limited cooperative agreement funds are also available for genotyping. Producers and/or veterinarians interested in participating should contact Dr. Beth Carlson at (701) 328-2655 for more information and to obtain appropriate forms. In the past, several producers have not been paid or had their payments delayed because the veterinarian did not use the appropriate forms or did not fill the forms out correctly. The veterinarian must use a VS form 5-29 and sheep must be identified using a scrapie tag.



As a reminder...

The following supplies are obtained from the state office. Payment must be received in the office before tags and books can be shipped.

- Brucellosis vaccination tags (\$80/box)
- Official USDA silver tags (\$80/box)
- North Dakota health certificate books (\$15/book)

The following supplies are obtained from the federal office:

- Scrapie tags
- Tuberculin
- EIA forms
- TB and Brucellosis test charts
- Brucellosis vaccination certificates
- Small animal health certificates

Official Identification

It is a federal offense to remove official identification from livestock. Any removal of USDA or Canadian ear tags (including bar code and RFID tags) should be reported immediately to either the federal Area Veterinarian in Charge (AVIC) or the state veterinarian.



Humane Treatment of Animals

The State Board of Animal Health and North Dakota Department of Agriculture have been participating in a group called the North Dakotans for Responsible Animal Care, a coalition of groups involved in animal care in the state. Members include the North Dakota Stockmen's Association, North Dakota Veterinary Medical Association, North Dakota Farmers Union, North Dakota Farm Bureau, Central Dakota Humane Society, Humane Society of Fargo Moorhead, and Dakota Zoo. The group has been working on proposed changes to North Dakota Century Code 36-21.1, Humane Treatment of Animals. A bill containing those proposed changes, SB 2211, has been introduced in the 2013 Legislature.

Contact North Dakotans for Responsible Animal Care for more information at www.ndanimalcare.com.

North Dakotans for
Responsible
Animal Care

Veterinary Prescription Drugs and the VCPR

by John R. Boyce, DVM, PhD

The rules of the North Dakota Board of Veterinary Medical Examiners state that, “veterinary prescription drugs are to be used or prescribed only within the context of a valid veterinarian-client-patient relationship.” (87-04-01-01)

One of the grounds for discipline listed in the veterinary medical practice act is, “the use, prescription, or sale of any veterinary prescription drug, or the prescription or an extra-label use of any over-the-counter drug in the absence of a valid veterinarian-client-patient relationship.” (43-29-14)

The practice act was amended last year to allow for an exception to the VCPR requirement only for a veterinarian dispensing a prescription drug prescribed by another licensed veterinarian who had a VCPR with the client if the prescribing veterinarian had an inadequate supply of the drug and failure to dispense the drug would cause an animal to suffer, and if the dispensing veterinarian verified the prescription with the prescribing veterinarian. (43-29-19)

Veterinary prescription drugs are defined as drugs that carry the statement, “Caution: Federal law restricts this drug to use by or on the order of a licensed veterinarian.”

The board rules specify details regarding the medical records and labeling requirements for veterinary prescription drugs dispensed to clients. (87-04-01-02 and -03)

Any use of veterinary prescription drugs outside the above approved dispensing format constitutes a violation of the veterinary medical practice act and may be grounds for discipline.

The VCPR is defined in federal law and in the practice act (43-29-01.1). A key provision is that the relationship, “exists only when the veterinarian has recently seen and is personally acquainted with the keeping and care of the animal by virtue of an examination of the animal

and by medically appropriate and timely visits to the premises where the animal is kept.” It is understood that “animal” can include a group of animals within an operation.

Clearly, the above definition is open to some interpretation with regard to terms like “recently seen” and “medically appropriate and timely visits.” The American Association of Bovine Practitioners recently conducted a survey of its members and a compilation of the 389 completed surveys is posted on the group’s website, www.aabp.org. When asked whether they believed that an on-site visit was necessary to maintain a valid VCPR, an overwhelming number of the survey respondents said “yes.” Similarly, an overwhelming majority disagreed with the idea that a VCPR could be established based on an examination of records without a visit from the veterinarian in a timely manner. When asked how frequently a visit should be made to maintain a valid VCPR, responses differed with respect to feedlot, cow/calf and dairy operations. For feedlot and dairy operations, the majority thought a monthly visit was indicated, with quarterly visits the second choice. For cow/calf operations, twice per year was the preferred frequency, with quarterly and annual visits selected almost equally as alternates. Given these results, it is hard to argue that a VCPR exists in cases where the veterinarian does not make at least an annual visit to the operation.

From time to time, the board is presented with a complaint against someone considered to be practicing veterinary medicine without a license. If the person is doing something that is included in practice act under the definition of the practice of veterinary



medicine (surgery or dentistry, for example), the board can issue a cease and desist letter and/or refer the case to the county state’s attorney for prosecution. Many of these procedures involve the use of anesthetics, sedatives and tranquilizers, all of which are veterinary prescription drugs that, as such, require a valid VCPR. Veterinarians who dispense prescription drugs to individuals in the absence of a valid VCPR are in violation of the practice act and federal law. In addition, veterinarians who dispense such drugs to clients without proper labeling or other safeguards that would help prevent the diversion of those drugs to individuals engaging in unlicensed practice could be responsible for promoting unlicensed practice, which is one of the grounds for discipline in the board rules. (87-05-02-01)

Licensing boards are constituted by state legislatures for the purpose of public protection. Public safety, not to mention animal welfare, can be compromised when veterinary prescription drugs are used outside the context of a valid veterinarian-client-patient relationship.

John R. Boyce, DVM, PhD, is Executive Secretary of the North Dakota Board of Veterinary Medical Examiners

North Dakota Veterinary Medical Association

The 2013 NDVMA convention will be held **Aug. 1-3**, at the Ramkota Hotel in Bismarck. Check the NDVMA website at www.ndvma.com for details.

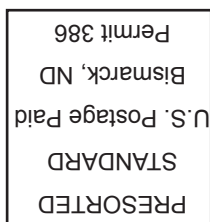
Veterinary Loan Repayment Programs

North Dakota Veterinary Loan Repayment Program

This program was created and is funded by the North Dakota Legislature. Veterinarians can apply to receive up to \$80,000 toward student loan repayment over four years to provide food animal services in rural areas of North Dakota. Members of the State Board of Animal Health make recommendations to the State Health Council regarding selection of veterinarians for the program. The first recipients were selected in February 2008. Since then, 15 veterinarians have been selected to receive funds. Of those, 12 are still providing veterinary service to the community for which they were selected and several own or co-own their practice.

Veterinary Medicine Loan Repayment Program administered by the National Institute for Food and Agriculture

This program was created and is funded by the United States Congress. Veterinarians can apply to receive up to \$75,000 toward student loan repayment over three years in return for providing food animal services. Based upon input from producers, veterinarians and extension, the state veterinarian nominates areas of the state to be designated as "veterinary shortage areas." A national committee determines whether or not to designate each area. If so designated, veterinarians who will provide service in those areas can apply. Applications are also reviewed by a national committee and there is no guarantee every state will receive funds. Since the first recipients were selected in the fall of 2010, two veterinarians in North Dakota have been selected for this program.



Animal Health News
North Dakota State Board of Animal Health
North Dakota Department of Agriculture
600 E. Boulevard Ave., Dept. 602
Bismarck, ND 58505-0020