

Animal Health News

Veterinary News from the North Dakota State Board of Animal Health

Brand, premises registration combined

By Jim Clement, DVM

Premises Registration

The North Dakota Stockmen's Association (NDSA) is the state's administrator and allocator for that portion of any federally-sponsored, animal ID program that pertains to cattle, horses and mules.

The 30,000 brands registered with the NDSA are associated with approximately 12,000 premises. Brands are renewed every five years. Beginning this July, brand renewal and premises registration will be combined. Wade Moser, NDSA executive vice president, and Dr. John Weimers, national ID coordinator, have discussed the need for NDSA to be able to handle large batch uploads when the brand renewal process begins. Weimers is hopeful the necessary technology will be available by July.

Sheep premises registration is ongoing. All sheep producers with scrapie premises numbers have been sent National Animal Identification System (NAIS) premises application forms. Premises numbers are being assigned upon receipt of these applications.

Outreach

Outreach efforts have included producer education, a North Dakota cattle industry stakeholder's trip to Joplin Regional Stockyards and a mailing to sheep producers focusing on premises registration.

BOAH veterinarians have made presentations on animal identification and NAIS at 10 livestock producer meetings, attended by at least 500 producers during January 2005. In particular, area radio ag journalist Al Gustin has made a great effort to keep his audience informed about animal ID. Gustin has scheduled two prime time forums during the larg-

Premises forms are online

Premises registration forms can be down-loaded and printed the State Board of Animal Health Web site at:

www.agdepartment.com/Forms/NAISPremisesRegistration.pdf

Also available on the Internet is the new National Animal Identification System (NAIS) website – <http://www.usda.gov/nais>. The U.S. Animal and Plant Health Inspection Service (APHIS) has designed the site to be a one-stop resource to facts the system, including national news, the site provides contact information for state and tribal animal health authorities.

est regional (KFYR Agri-International) ag-show to discuss animal ID issues and to demonstrate current technologies associated with animal ID. BOAH intends to use the North Dakota Agricultural Statistics Service (NDASS) to handle a mailing that will provide livestock producers with a premises registration form. Other state agencies and private entities may be used to mail registration forms.

Pilot Projects

The North Dakota State University Dickinson Research Extension Center (DREC) is managing CalfAID, a pilot project to document the physical and electronic processes needed to do 48-hour traceback in accordance with the U.S. Animal ID Plan (USAIP) and NAIS.

DREC processed 4,672 calves on 25 North Dakota ranches during the fall of 2004. After the calves were tagged, individual producers conducted business as usual. Traceback efforts began once the calves were sold. To date, 1,430 miles and 379 workhours have been logged tracking the calves. Tracking involves extensive contact with producers, stockyards, brand offices, buyers, backgrounders and feeders.

To date, 1,088 calves (23.3 percent of the 4,672 calves tagged) remain with the producers as replacements. Of the remaining 3,584 calves, approximately 55 percent moved directly to their next destination, while 45 percent moved through established marketing channels. As these calves were traced by the DREC, 955 calves (26.6 percent of the 3,584 marketed calves) were moved into 23 backgrounding facilities and 2,090 calves (58.3 percent of the 3,584 marketed calves) arrived at 25 different feedlots in several states. Five calves (less than 0.1 percent) were slaughtered, and 534 calves

Continued on page 4

Inside

5 reasons to have a biosecurity plan	2	Antibiotics found in Colorado river	4
West Nile virus on decline	2	North Dakota updates	5
Animal antibiotic use drops 8%	4	Johne's program growing	6

5 reasons to have a biosecurity plan

Karen Jordan, DVM, a representative of Dairy Farmers of America and chair of the National Institute for Animal Agriculture Cattle Health Committee, provides reasons to have a biosecurity plan.

1. To prevent economic loss caused by production losses or premature culling.
2. To prevent theft of cattle, machinery, tools and equipment.
3. To protect the “wholesome” image of the milk or beef you are selling and protect “market access” of the products you are selling.
4. To prevent or minimize an interruption in cash flow or equity.
5. To change the attitude of farmers/owners/employees to be aware of suspicious activities, suspicious people and to “harden” their farming operation so that their farm would be a difficult target for a terrorist or irate employee or irate neighbor to hit.

Bovine Biosecurity Resources

USDA, Animal and Plant Health Inspection Service
www.aphis.usda.gov/lpa/issues/fmd/fmdbiose.html

American Association of Bovine Practitioners
www.aabp.org

National Biosecurity Resource Center for Animal Health Emergencies
www.biosecuritycenter.org

National Cattleman's Beef Association
www.beef.org

Bovine Alliance on Management and Nutrition (BAMN)
www.aphis.usda.gov/vs/ceah/ncahs/nahms/dairy/dairy.htm

Johne's Information Center, University of Wisconsin
www.johnes.org

This article originally appeared in the Special Issue 2005 of *Cattle Health Report*, published by the National Institute for Animal Agriculture in cooperation with the Animal and Plant Health Inspection Service of the U.S. Department of Agriculture.

VS keeps 143 premises quarantined

A Dec. 2 report from the U.S. Department of Agriculture's Animal and Plant Health Inspection Service (APHIS) shows that 143 premises still remained quarantined because of Vesicular Stomatitis (VS). Colorado and New Mexico are the only states with quarantined premises, of which 138 are located in Colorado. Texas was released of all quarantined premises on Oct. 19, after all 15 premises in that state were cleared.

Currently, 28 premises are in the 30-day countdown period to be released from quarantine. A total of 177 equine are in-

involved in the current quarantines, compared to 30 ruminant cases.

A total of 293 premises have been quarantined in the U.S. since the first report back in May. In all, 404 equine have been diagnosed with VS.

This article originally appeared in the Fall 2004 issue of *Equine Health Report*, published by the National Institute for Animal Agriculture in cooperation with the Animal and Plant Health Inspection Service of the U.S. Department of Agriculture.

West Nile virus on decline in US

West Nile virus (WNV) has been a source of concern for many horse owners since it was first detected in 1999 in the western hemisphere. In 2002, more than 15,250 equine cases were reported in the U.S., most notably in the central portion from Texas to Minnesota. While the mosquito-borne virus has continued to be prevalent, the latest numbers from USDA show that WNV has been decreasing in the United States. As of mid-December, a total of 1,341 cases of WNV in equine have been reported, less than 10 percent of the 2002 totals. In 2003, 5,181 equine cases were reported.

Contrasting the national trend, California has seen a sharp increase in WNV equine cases. In 2003, California had only one equine case of WNV. In 2004, the state recorded more than 500 equines infected with the virus. This is likely attributed to significant detection of WNV in sentinel chickens, mosquito pools, and dead bird submissions throughout California in 2004, according to the California Department of Food and Agriculture. Other states, such as Colorado, New Mexico, Texas and Pennsylvania, have shown significant decreases from 2003 numbers.

According to the North Dakota State University Veterinary Diagnostic Laboratory reports, North Dakota reported 40 positive cases of equine WNV in 2003 and none in 2004.

The most effective method for protecting horses against WNV is mosquito control practices, such as reducing potential sources of water where mosquitoes can breed. Additionally, both a killed vaccine and live-vectored recombinant vaccines are available to help protect equine against the virus.

This article originally appeared in the Fall 2004 issue of *Equine Health Report*, published by the National Institute for Animal Agriculture in cooperation with the Animal and Plant Health Inspection Service of the U.S. Department of Agriculture.

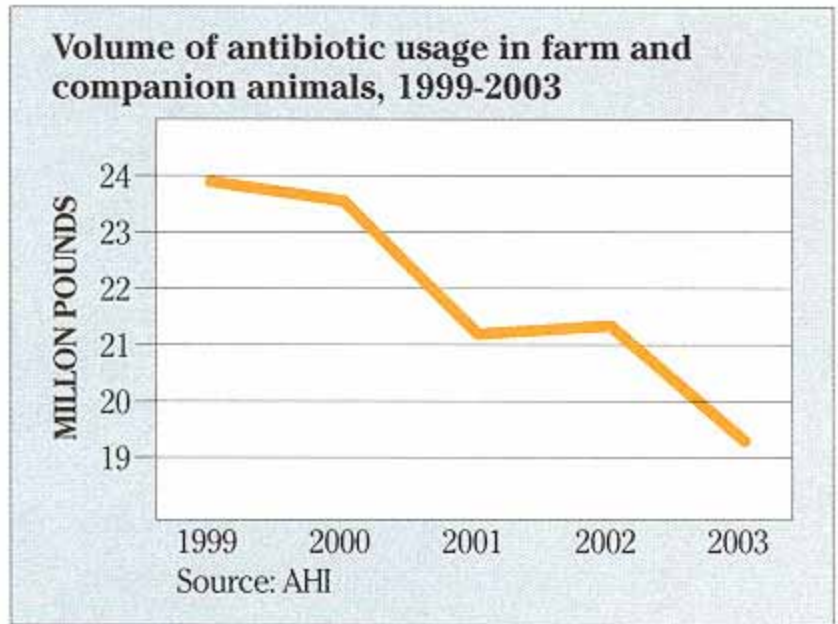
Animal antibiotic use drops 8 percent in 2003

New data from a survey of animal health companies show that the volume of antibiotics used in animals in the United States dropped nearly 8 percent in compared to the previous year.

In 2003, 20.2 million pounds of antibiotics were produced for use in farm and companion animals, a decline from 22 million pounds produced in 2002. Antibiotic production has declined steadily since 1999, when 24.4 million pounds were produced. The data were collected from a survey of members of the Animal Health Institute (AHI), consisting of companies that make medicines for pets and farm animals.

“Antibiotics, used carefully and judiciously to protect animal health, are an important component of our food safety system,” says Alexander S. Mathews, AHI president and CEO. “In addition, they help extend the quality and length of life for our cats, dogs and other companion animals. This annual data provides evidence of the careful use of these important products.”

Mathews also points to increasing evidence of the safety and importance of using antibiotics to keep food animals healthy. A recent peer-reviewed publication has concluded the risk of using antibiotics to keep animals healthy is very small, he says. Moreover, there is some evidence that there can be a greater risk to human health associated with banning products. In addition, published quantitative risk assessments show the risk of using these products to be very low.



AHI survey respondents provide an assessment each year of the amount of veterinary antibiotics produced for therapeutic use and health maintenance purposes. The percentage of veterinary antibiotics produced reported as therapeutic was 83 percent in 2001, 91 percent in 2002 and rose to 92 percent in 2003.

This article originally appeared in the January 2005 issue of *Swine Practitioner*, published by Vance Publishing, Inc., and is reprinted by permission.

Colorado researchers find traces of antibiotics in river

FORT COLLINS - A Colorado State University study is the first to show that antibiotic drugs used specifically for enhancing growth, preventing diseases and increasing feed efficiency in food animals, such as cattle, are making their way into public waterways.

Among the compounds were five tetracyclines and three ionophore antibiotics. Tetracycline drugs are widely used for treating human diseases and as animal antibiotics. Ionophore antibiotics are used exclusively in agricultural applications.

The two-year study was conducted at five test sites on the Cache la Poudre River, which flows about 90 miles from Rocky Mountain National Park before joining the South Platte River in Greeley. It passes by more than 50 agricultural

livestock operations.

“The presence of antibiotics in waterways drives two primary concerns,” said Ken Carlson, associate professor of civil engineering and principal investigator of the project. “The first is the potential toxic dangers of these compounds to fish, plants and other aquatic organisms - as well as to humans through drinking water. There is also a potential . . . that these types of animal and human antibiotics have on contributing to the emergence of strains of disease-causing bacteria that are resistant to even high doses of drugs.”

Carlson added that future studies are needed to determine exactly how the antibiotics make their way into public waterways, how long the drugs stay in water and sediment and to better under-

stand potential dangers to aquatic life, animals and humans.

As a result of the study, the CSU group is beginning to work with the agricultural community to identify best management practices at agricultural operations, such as waste handling that will minimize the release of these compounds to the environment and contribute to sustainable agricultural practices in the future.

According to Amy Pruden, assistant professor of civil engineering and co-principal investigator of the study, these compounds end up in waterways because only a fraction of the drugs are completely metabolized by animals or humans, which means the medicine’s active compounds often pass through the

Continued on page 4

Animal ID

Continued from page 1

(14.9 percent of 3,584 marketed calves) are unaccounted for.

Of the 25 herds, 15 herds were 100 percent traceable utilizing the existing systems available to track cattle. Ten herds lost more than 33 percent of their calves entering the marketing channels. Of the total 4,672 calves tagged, 88.6 percent were located and 11.4 percent were unaccounted for; additional efforts are underway to trace them.

The principle point of loss was during the marketing process. Calves simply moved through or were commingled with larger groups of calves. Subsequently, the ability to follow the calf to the next destination was unavailable or not recorded.

The author is the Animal ID coordinator for the State Board of Animal Health.

Antibiotics

Continued from page 3

body and are discharged into public wastewater systems or waste lagoons. Since these compounds are still active, the ultimate fate of these antibiotics is an important environmental issue.

Another important finding of the study was the significantly greater concentration of the three ionophore antibiotics, used only for food animals, in the sediment compared to the overlying water. For monensin, the concentration in the sediment was approximately 1,000 times greater than in the river. Salinomycin was about 500 times greater in the sediment than the water column and narasin was 100 times greater in sediment than water. However, this is still below safe concentrations for aquatic life and humans. These results indicate that antibiotics can accumulate in the sediment and potentially impact stream health.

A press release issued Oct. 19, 2004, by Colorado State University was the source for this article.

Survey: Physicians still link cats to toxoplasmosis

A recent issue of *Contemporary OB/GYN* magazine contains a report that physicians still believe cats are a main cause of toxoplasmosis transmission in the U.S. despite contrary evidence.

“Most doctors still focus on the pet cat as the primary source for toxoplasmosis infection, when in reality, pregnant women in the U.S are more likely to contract the disease from eating raw or undercooked meat and from gardening without wearing gloves,” said Dr. Patrick Duff of the Department of Obstetrics and Gynecology at the University of Florida.

Toxoplasmosis is caused by single-celled parasite, *Toxoplasma gondii*, and is transmitted through contact with infected meat or through accidental ingestion of contaminated cat feces. Although it poses no serious risk to healthy individuals, infection during pregnancy can result in eye or brain defects in infants.

Dr. James Richards, director of the Cornell Feline Health Center at Cornell University College of Veterinary Medicine, says contracting toxoplasmosis directly from a pet cat is almost impossible.

“Dealing with the most likely sources of infection instead of erroneously blaming—and then banning—the cat will help to keep the entire family, including its feline members, living together in harmony,” Richards said. “Misinformed advice to ‘get rid of the cat’ needlessly creates a lot of heartache.”

The Humane Society of the United States (HSUS) recently mailed the brochure, *Your Baby and Your Pet*, to 32,636 members of the American College of Obstetricians and Gynecologists (ACOG). The brochure describes how to introduce babies and pets and provides information about toxoplasmosis. The mailing also included *Toxoplasmosis: A Practical Guide for the Clinician*, written by Jeffrey D. Kravetz, MD, of Yale University School of Medicine, and a survey.

The survey asked two questions: Do you ask your pregnant patients if they have cats? If they have cats what do you advise? Respondents checked all of eight following responses that apply: blood tests for mother; blood tests for cat; put cat outside; re-home cat; have someone else clean the litter box; avoid eating raw or undercooked meat; wear gloves when gardening and “other.” Respondents were asked to check all that apply.

The survey showed most obstetricians and gynecologists ask pregnant patients if they have a cat. For patients with a cat, 1,364 physicians offices recommended not cleaning the litter box, 1,101 recommended avoiding avoid raw or undercooked meat, and 888 recommended wearing gloves while gardening. The survey indicates almost half the respondents do not advise patients of all three sources of infection. Survey results were based on 1,459 responses from all 50 states.

More than 400 doctors recommended blood tests for pregnant women who have cats, although this is not recommended in the U.S., according to Kravetz, since the false positive rate and the low prevalence of congenital infection make screening for pregnant women problematic.

The websites for the Humane Society of the United States, www.hsus.org; *Contemporary OB-GYN* magazine, www.contemporaryobgyn.net/obgyn/, and the U.S. Centers for Disease Control, www.cdc.gov, were the sources for this article.



Animal Health News

is published by

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North Dakota updates

Bovine spongiform encephalopathy

North Dakota has submitted 65 in-state samples for BSE testing, as of March 22, 2005. In addition, 115 samples collected out of state have been credited to North Dakota, bringing North Dakota's BSE testing total to 180 negative tests.

Humane complaints

The State Board of Animal Health (BOAH) received nearly 60 humane complaints in 2004. Fifteen complains have been received so far in 2005. All complaints are investigated by a board veterinarian, law enforcement, or a private practitioner.

Non-Traditional Livestock Program

North Dakota producers have submitted more than 3,000 captive deer and farmed elk samples with no positives for chronic wasting disease (CWD). The Non-Traditional Livestock Advisory Board is meeting monthly to develop the new administrative rules.

Scrapie Program

From Sept. 15, 2003 to Sept. 15, 2004, 2990 sheep were genotyped through North Dakota's scrapie cooperative agreement. Only enough money is provided to test 665 sheep during the current 2004-05 period. At this time only rams are being tested, but some ewes will likely be tested towards the end of the agreement period.

Gov. John Hoeven has signed a temporary emergency rule that brings the state into compliance with Consistent State Status requirements. A public hearing has been scheduled on April 12, 2005, to make the rule permanent.

The State Veterinarian's Office is continuing work on scrapie trace-outs. An animal that tested positive on routine slaughter surveillance in Texas last spring has led to two infected flocks and more than 20 potentially exposed flocks in North Dakota. The job of locating all of the exposed sheep should be finished soon.

The Voluntary Scrapie Board recently met by conference call to approve a new flock for the Voluntary Flock Certification Program. That doubles the number of flocks in the program, and a third flock is expected to meet the requirements soon.

All flocks that are determined to be source, infected, or exposed are required to have a Post Exposure Monitoring and Management Plan (PEMMP), which requires annual inspections for five years to ensure program compliance. North Dakota flocks with PEMMPs in place are now being reinspected. Reports indicate very good compliance.

Emergency Program

The Veterinary Reserve Corps annual training was held in Bismarck on Jan. 10-11. Several topics were covered, including geographic information systems (GIS) and media relations. Dr. Jon Van Berkomp worked with the group on Foreign Animal Disease (FAD) clinical cases. Next year's training will likely be more interactive with fewer lecture-type presentations.

Dr. Deidre Qual, assistant state veterinarian, gave an overview of the Private Practitioner's Portal (PPP), a web-based system for reporting diseases and humane complaints. Now in final testing, the PPP will eventually become a link between practitioners, the diagnostic lab, the health department, and the state veterinarian's office.

Qual is also working with Homeland Security Integration group, Functional and Task Coordinators group, Homeland Security Training and Exercise Committee and the Bioterrorism Working Group on homeland security issues.

Johne's program growing

By Tom Moss, DVM

The North Dakota Johne's program continues to gain new participants with very few producers previously enrolled dropping out. As of Dec. 31, 2004, 45 dairy herds, 93 beef herds and two goat herds were enrolled in the program. Producers are testing fewer animals per herd instead of testing whole herds. This is likely due to the decreased reimbursement. Program funding should be adequate this year.

The Johne's program focuses on assisting producers whose herds have Johne's disease. The program emphasizes annual testing and improved management practices to rid herds of the disease. When a herd reaches a negative herd test (Level A), the producer and their veterinarian are urged to enter the herd in test negative or status side of the program at Status Level 1, which is more comparable to the national program. The requirements for testing herd additions on the Status side are not that hard to meet and make sense if a herd is to remain test negative. The state receives additional funding for each herd in the Status side.

A proposal for a Johne's Disease Demonstration Herd project in North Dakota has been submitted to USDA Veterinary Services. The proposal seeks \$20,225 in federal funds to study the disease in a North Dakota beef herd. The state will furnish about \$5,000 of in-kind services. If approved, this project would begin next fall.

The author is the designated Johne's disease coordinator for the State Board of Animal Health.

Important reminder!

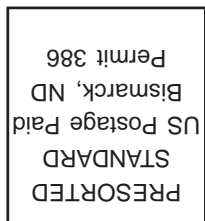
All cattle coming into North Dakota from other states must have health certificates.

The only exceptions are animals going directly from the farm of origin to a licensed auction market or a licensed state or federal slaughter facility. However, animals that come to an auction market from out of state must have a health certificate to leave the market to go to another destination in North Dakota.

Animals coming into the state from an auction market and moving to another auction market DO require a health certificate. Additional import requirements may also apply.

Accredited auction market veterinarians are required to keep informed of current import regulations and to report violations.

North Dakota import regulations can be found at www.state.nd.us/lr/information/acdata/html/48-02.html. The legal basis for inspection in the North Dakota Century Code can be found at www.state.nd.us/lr/cencode/T36C14.pdf.



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