

Animal Health News



News for Veterinarians from the North Dakota State Board of Animal Health

More U.S. feed firms complying with regulations to prevent BSE

Active monitoring by the U.S. Department of Agriculture has found no cases of bovine spongiform encephalopathy (BSE) in U.S. cattle.

To prevent the establishment and spread of BSE in this country, the U.S. Food and Drug Administration implemented a rule – Title 21 Part 589.2000 of the Code of Federal Regulations – prohibiting the use of most mammalian protein in feeds for ruminant animals.

As part of the enforcement plan, FDA district offices were assigned in 1998 to inspect all renderers and feed mills and some ruminant feeders for compliance.

As of Feb. 27, 2001, there had been a total of 10,240 inspections of 10,065 firms. State officials conducted about 80 percent of these inspections. Various segments of the feed industry had different levels of compliance.

Renderers

Renderers are the first to handle rendered protein, and who send materials to feed mills and other ruminant feeders.

There are an estimated 260 rendering firms in the U.S of which 227 have been inspected.

North Dakota in compliance

As of July 31, all rendering plants, medicated feed mills and feed plants in North Dakota were in compliance with federal regulations regarding use of animal protein in feed.

Garry Wagner, fertilizer and feeds coordinator with the North Dakota Department of Agriculture (NDDA), said NDDA personnel had inspected the state's one rendering plant and about 130 feed plants and mills.

Wagner said the focus of the inspection program will now be on feedlots and individual farms that grind their own feed.

Of the 177 renderers handling material prohibited for use in ruminant feed:

- 96 percent labeled their products with the required caution statement.

- 86 percent had a system to prevent commingling.
- 97 percent followed recordkeeping regulations.

FDA licensed feed mills

The U.S. has an estimated 1,240 licensed feed mills of which 1,069 have been inspected.

Of the 397 licensed feed mills handling material prohibited for use in ruminant feed:

- 85 percent labeled their products with the required caution statement.
- 87 percent had a system to prevent commingling.
- 99 percent followed recordkeeping regulations.

Non-licensed feed mills

The total of non-FDA licensed feed mills is unknown, but the agency estimates there are between 6,000 and 8,000 of which 5,064 have been inspected.

Of the 1,829 inspected firms handling prohibited material:

Continued on page 5

Inside

Veterinary board licenses	8	2	West Nile Virus spreading	5
Anthrax outbreak possible		3	Cyanide possible cause of horse deaths	6
Veterinarians at risk for plague		3	Clean transportation vital to biosecurity	7
Drug establishments must register		4	Sheep tagging program near ready	8

ND veterinary board licenses 8

By Dr. John Boyce, Executive Director
North Dakota Board of Veterinary Medical Examiners



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Ted Quanrud, Editor

The North Dakota Board of Veterinary Medical Examiners (NDBVME), meeting June 4, in Bismarck, approved the following candidates for licensure to practice veterinary medicine in the state: Dr. Teresa Bessler, Powell, WY; Dr. Kelly Birchem, Fargo; Dr. Beth Wagner Carlson, Medina; Dr. Jacob Carlson, Medina; Dr. Hans Kaldahl, Grand Rapids, MN; Dr. Charles Noland, Circle, MT; Dr. Kristie Oppen, Bismarck, and Dr. Thomas Prieve, Ashby, MN.

The board discussed the proposed model veterinary practice act being developed by the American Association of Veterinary State Boards (AAVSB). The model act is not binding on any board because the ultimate decision on a practice act is up to the legislature in each state.

Dr. John Boyce represented NDBVME at the AAVSB Delegate Assembly in Boston on July 16, where delegates unanimously approved a motion introduced by Kansas, that read as follows:

The Kansas Board moves that the AAVSB continue to dedicate its resources to the ongoing development of an AAVSB "Model Practice Act Resource Tool" ("MPART") for its member boards. Further, while the current revision of the model represents good progress toward that accomplishment, we move that the current revision shall not be considered a finished product. Instead, further development shall occur, during which ongoing, broad based input shall be utilized from outside organizations, including the AVMA, as well as representation from the public sector. Periodic progress reports shall be made to members.

An article in the July 2001 issue of *DVM Magazine*, incorrectly stated that NDBVME has adopted much of AAVSB's model act. The only change to North Dakota's practice act this year was a bill introduced by the board and approved by the Legislature that allows the board to accept certificates issued by the AAVSB's Program for the Assessment of Veterinary Education Equivalence, in addition to certificates issued by the AVMA's Educational Commission for Foreign Veterinary Graduates.

The Veterinary Technician National Examination was administered to 15 candidates in Fargo on June 15.

The board deleted 12 veterinarians and six veterinary technicians from the roster of licensees for non-payment of the license fee.

A new state law states that the practice of a profession or occupation in North Dakota is based on the location of the person receiving those professional or occupational services, not the location of the person providing the services. This means that out-of-state veterinarians providing services to North Dakota clients and their animals are practicing veterinary medicine in North Dakota and must be licensed in the state. The only exceptions are for veterinarians consulting with North Dakota licensed veterinarians (this exemption was already in our practice act), and veterinarians who are providing services to clients by a remote means, but are continuing a professional relationship that was formed in the state where the veterinarian is licensed.

Gov. John Hoeven has appointed Dr. Dean Christiansen, Ashley, to the NDBVME, succeeding Dr. Dan Treat, Fargo. The other two board members are Drs. London Jacobs, Powers Lake, and James Clement, Mandan.

The next board meeting will be in Bismarck on Monday, October 1.

Anthrax outbreak possible in N.D.

The spread of anthrax in the U.S., including at least one confirmed human case, means that veterinarians, as well as farmers and ranchers, should be careful, while on the lookout for the disease.

“We had a record number of cases in 2000, and conditions are unfortunately favorable for outbreaks this year,” said Dr. Larry Schuler. “Minnesota and Texas have already confirmed cases, and cases have been reported in Canada.”

Schuler has urged producers to check their animals frequently and to immediately report any suspicious deaths to their veterinarian. It is important that the dead animal not be moved until examined by a veterinarian.

“Producers should also talk to their veterinarian about vaccinating their animals, especially in high risk areas,” he said.

Practitioners who suspect anthrax cases should call the State Veterinarian’s Office immediately at (701) 328-2654.

Last year’s outbreak was centered in northeast North Dakota, although a single case was confirmed in Hettinger County in the southwest corner of the state. An estimated 150 animals died in the 2000 outbreak, six times the total of

the previous 10 years combined. Most cases were in cattle, but several bison and horses also died.

Already, anthrax has been confirmed in the death of a single beef cow in Roseau County in northwest Minnesota. The disease is more widespread in Texas, where cases have been confirmed in cattle in three counties and suspected in several others. Texas also reports a “significant” loss of white-tailed deer in two counties.

More importantly, Texas also has the first confirmed human case of anthrax this year.

On July 5, the Texas Department of Health reported a possible case of cutaneous anthrax in a 30-year-old Hispanic man, who had had skinned a buffalo that had presumably died from anthrax. The Centers for Disease Control and Prevention analyzed serum specimens obtained from the man using an anti-PA enzyme-linked immunosorbent assay (ELISA), which tests for antibodies to a toxin protein produced by *Bacillus anthracis*. Initial laboratory tests were performed on specimens collected on day 3 (June 28) and

Continued on page 7

Veterinarians are at risk group for plague

Veterinarians who treat cats and dogs that may have come in contact with wild rodents, especially prairie dogs, should be aware of the possibility of plague.

The once-dreaded disease, also known as the Black Death, killed a third of the population of Europe in the 14th Century. It has been detected in prairie dog populations in North Dakota and other western states, and has also been found in other small mammals such as chipmunks and rabbits.

Wyoming health officials recently warned hunters and residents to take precautions against the disease after it was determined that plague had caused the recent deaths of prairie dogs in the National Thunder Basin Grasslands.

Plague is caused by the bacteria *Pasteurella pestis* (*Yersinia pestis*), and is most commonly spread by fleas that infest rodents. Humans can acquire the disease by handling sick animals. The deadliest form of the disease, pneumonic

plague, is caused by inhaling the bacteria from an infected animal or person.

There are three forms of plague in humans:

Bubonic plague symptoms include enlarged, tender lymph nodes, fever, chills and prostration;

Septicemic plague symptoms include fever, chills, prostration, abdominal pain, shock, and bleeding into skin and other organs; and

Pneumonic plague symptoms include fever, chills, cough, difficulty breathing, and rapid shock and death if not treated early.

In wild animals, the disease is known as sylvatic plague. It is most common in rodents and other small animals such as rabbits. While rare in larger animals, a deer in Wyoming was found to have the disease.

The Centers for Disease Prevention and Control lists veterinarians as a risk group

for the disease:

“Veterinarians and their assistants engaged in small-animal practices in plague enzootic areas have a definite risk of exposure to plague infection from their free-roaming patients. Since 1959, four veterinarians and one veterinary assistant have had confirmed plague infections; one veterinarian in Santa Clara County, California, died. The veterinary assistant (who subsequently had part of a lung removed) developed primary plague pneumonia after exposure to a terminally ill cat, subsequently confirmed to have plague pneumonia. Additionally, there have been reports of dogs and cats associated with the acquisition of plague by 20 other persons since 1959, demonstrating the increasing awareness of the role of pet carnivores in the epidemiology of human plague.”

The U.S. averages 10 to 15 cases of plague in humans annually. No human case has been reported in North Dakota.

Drug establishments must register with FDA

FDA's Center for Drug Evaluation and Research (CDER) has a new system for the 2001 annual registration of drug establishments, including veterinary drug establishments and licensed medicated feed mills. The new procedure requires registered establishments to obtain, complete, and submit a Form FDA 2656 (Registration of Drug Establishment) using one of the following formats:

IF THERE IS NO CHANGE SINCE PREVIOUS REGISTRATION – the firm should fill out the form with only the labeler code (not required for medicated feed mills), registration number, reporting firm name, and signature, title, and date. The Reason for Submission box should be filled out to read "Annual-No Change".

IF THERE IS A CHANGE SINCE PREVIOUS REGISTRATION – the form is to be filled out with the labeler

code (not required for medicated feed mills), registration number, reporting firm name, and signature, title, and date, and any applicable sections where a change has occurred. The Reason for Submission box should be filled out to read "Annual".

These directions are available on the CDER information line at (301) 594-1086. Form 2656 and instructions can also be found on the Program Support Center homepage at: <http://forms.psc.gov/forms/FDA/fda.html>

CDER recommends that the establishments follow the registration schedule as outlined in 21 CFR 207.21(a), available at www.access.gpo.gov.

CDER will no longer issue the computer generated print-out of Form 2656 to registered drug establishment owners and operators.

Harvard researchers identify possible anthrax therapy

The speed and ease with which the anthrax bacterium, *Bacillus anthracis*, can cause death make it one of the most dangerous of biological weapons. A vaccine for humans exists, but the rarity of infection makes mass vaccination impractical. Unless antibiotics are given before symptoms develop, an unvaccinated victim usually dies within a few days.

Now, researchers at Harvard Medical School have identified a potential new anthrax therapy. Developed by R. John Collier, professor of microbiology and molecular genetics, and postdoctoral students Bret Sellman and Michael Mourez, the approach may lead to a double-duty drug that acts as an equally effective preventive vaccine and also a more versatile cure. The study appears in the April 27 issue of [Science](#).

B. anthracis secretes the three subunits of its toxin—protective antigen, lethal factor, and edema factor—into the bloodstream of its host. Seven protective-antigen molecules then assemble into a pre-

pore. The pre-pore undergoes a change in shape, forming a mature pore that allows lethal factor and edema factor to enter cells. Once inside, these toxin subunits destroy the cell, paving the way to disease.

The authors generated mutants of protective antigen that assembled with normal protective-antigen molecules to form a pre-pore, but they inhibited the otherwise normal pre-pore from maturing. The researchers hypothesized that these mutants might thereby serve as an anthrax therapy because they would block edema factor and lethal factor from entering the cell.

To test their hypothesis the group injected rats with a normally lethal mix of protective antigen and lethal factor and a protective-antigen mutant. The protective-antigen variants "totally protected the animals, whereas the control animals became moribund within 90 minutes," said Collier.

Variants of protective antigen are particularly good candidates for an anthrax

therapy. Normal protective antigen is already known to be safe in humans since it is the major component of the current anthrax vaccine. Mutant protective antigen also elicits an immune response equivalent to that generated by normal protective antigen. Therefore, it may fill the bill as both an anthrax vaccine and treatment.

Some other disease-causing bacteria also form a pore similar to that of *B. anthracis*, so "it may be possible to generalize this approach to certain other diseases," Collier said.

This article appeared in the May 4, 2001, issue of [Focus: News from the Harvard Medical, Dental and Public Health Schools](#) and is reprinted here with permission. For a more complete explanation of this research, click on "Full Story" at www.med.harvard.edu/publications/Focus/2001/May4_2001/

**Wolf appointed chair
of NIAA's Sheep
Health Committee**

This headline, reprinted directly from the Winter/Spring issue of [Sheep Health Report](#), could be worthy of inclusion on Jay Leno's "Tonight Show." The story actually dealt with the appointment of Dr. Cindy Wolf, a University of Minnesota veterinarian, to the Sheep Health Committee of the National Institute for Animal Agriculture.

News Briefs

Meeting calendar

The North Dakota State Board of Animal Health will meet at 9 a.m., Sept. 12, in the Peace Garden Room, State Capitol, Bismarck.

The North Dakota Non-Traditional Livestock Advisory Board will meet at 9 a.m., Aug. 29, at Dakota Zoo in Bismarck.

Brucellosis rules waived

North Dakota no longer requires evidence of brucellosis vaccination for importation of cattle that have resided in South Dakota for at least 60 days.

South Dakota no longer requires evidence of brucellosis calfhood vaccination for import of cattle from North Dakota.

Zoo imports expedited

North Dakota's four zoos will now have their non-traditional livestock import requests processed directly by the State Veterinarian's Office.

At its regular meeting on March 13, the State Board of Animal Health unanimously agreed to a resolution, presented by the zoos, that drops the requirement that the zoos first present their NTL import requests to the board.

The zoos are Chahinkapa Zoo, Wahpeton; Dakota Zoo, Bismarck; Red River Zoo, Fargo, and Roosevelt Park Zoo, Minot.



A meerkat at Fargo's Red River Zoo.

Florida, Georgia report cases

West Nile Virus spreading

TALLAHASSEE – Add Florida and Georgia to the list of states with confirmed cases of West Nile Virus (WNV).

As of July 25, Florida Department of Health officials have reported seven avian, one equine and one possible human case of West Nile Encephalitis. A medical alert has been issued for 14 Florida counties. In neighboring Georgia, two avian cases have been confirmed, and a spokesman for the state's Division of Public Health said the division has received many calls from Georgia physicians with patients suffering from "apparent viral encephalitis."

Prior to August 1999, WNV had never been reported in the Western Hemisphere. From 1999 to 2000, a total of 82 cases of disease and 9 deaths occurred in the New York City and New Jersey metropolitan areas. Mosquitoes spread the virus by feeding on the blood of infected birds, which circulate the virus in their system. The disease cannot be spread from person to person.

Prior to this report only 23 dead crows have tested West Nile virus-positive in the year 2001: i.e. New Jersey (14), Maryland (4), New York (2), Rhode Island (2), and Connecticut (1). In the preceding year, a total of 4,323 birds tested West Nile virus-positive in 12 states: Connecticut, Delaware, Maryland, Massachusetts, New Hampshire, New Jersey, New York, North Carolina, Pennsylvania, Rhode Island, Vermont, and Virginia, plus the District of Columbia.

As of this time last year, only 8 birds had tested West Nile virus-positive, so 23 positives already could signify that we have a bad year ahead, at least for birds. However, last year's experience showed that more dead birds do not necessarily translate into more dead humans.

WNV causes a form of encephalitis. According to the Centers for Disease Control and Prevention, most infections are mild. Symptoms include fever, headache, and body aches, occasionally with skin rash and swollen lymph glands. More severe infection may be marked by headache, high fever, neck stiffness, stupor, disorientation, coma, tremors, convulsions, muscle weakness, paralysis, and, rarely, death.

More U.S. feed firms comply with BSE rules

Continued from page 1

- 67 percent labeled their products with the required caution statement.
- 82 percent had a system to prevent commingling.
- 99 percent followed recordkeeping regulations.

Firms must have a commingling prevention system when products containing prohibited material are manufactured in the same facility as products that do not contain prohibited material.

In January 2001, FDA field offices were assigned to reinspect 834 firms that were not in full compliance with the rule. Because many of these firms had commit-

ted to implementing the regulation, there have been higher levels of compliance after completion of follow-up inspections. Of the 157 re-inspections of renderers, feed mills, and other facilities that had been conducted by February 27, only one firm, a rendering firm, continued to be out of compliance. FDA continues to conduct these re-inspections, and FDA and state feed control officials continue conducting initial inspections.

A spreadsheet containing information about inspections conducted under the FDA's ruminant feed (BSE) rule has been posted on FDA/Center for Veterinary Medicine's (CVM's) homepage at: www.fda.gov/cvm/efdi/efbi.html

Cyanide poisoning considered possible cause of horse deaths

The recognition of a “new” syndrome – Mare Reproductive Loss Syndrome (MRLS) – among pregnant mares in central Kentucky in late April and early May has reverberated throughout the equine industry. Now, cyanide poisoning is being considered a possible cause for the mysterious deaths of hundreds of foals and fetuses.



Necropsy examinations of pericarditis cases reveal the pericardium is completely covered with grape-sized bright yellow fibrinous nodules. The eye condition involves hemorrhage followed by fibrin deposition.

Analysis of fetal tissue samples submitted by LDDC on May 17 to the toxicology laboratory at the College of Veterinary Medicine, University of Illinois, indicated low levels of cyanide or a cyanide-containing compound in fetal heart tissues.

Clinical Signs

Two reproductive entities have been identified with MRLS – late of close-to-term losses (LFL) and early pregnancy losses (EFL).

Signs associated with LFL include:

- Delivery from one month premature to after the “due” date, sometimes but not always associated with agalactia and dystokia.
- “Red Bag” deliveries may be a feature, but not always.
- Foals born alive are sometimes weak, suffering respiratory distress and requiring intensive veterinary care.

Signs associated with EFL include:

- Occurrence post 35 days breeding and prior to 100 days.
- Palpation may indicate a normal pregnancy but ultrasound examination indicates abnormal eccogenic fluid (cloudy and flocculent) around the fetus. This is followed by fetal death and expulsion.

Distribution

Cases of MRLS have been widely reported throughout Kentucky among all horse breeds. Reports from contiguous and other states north of Kentucky indicate MRLS may also be occurring in those areas. It is estimated that 5 percent of the 2001 thoroughbred foal crop produced in Kentucky has been lost and approximately 20 percent of the foal crop for 2002.

Pathological Findings

All virological tests have proved negative to date. Although streptococcus and actinobacillus species have been isolated from a high proportion of LFL cases examined at the LDDC, they are considered secondary invaders following the primary insult. Gross and histopathological lesions indicate a constant pattern in the fetus and amniotic sac of the placenta. Fetal lungs show evidence of intrauterine toxic insult and inflammation, as does the amniotic sac.

Possible causes of MRLS 2001

Weather data provided by the Department of Agricultural Engineering for the month of April confirmed severe frosts on the nights of April 17 and 18. The month overall had experienced low rainfall. Temperatures through the month had been higher than normal providing ideal conditions for pasture growth. This was an exact replica of weather data observed during April 1981 when a similar syndrome was reported in central Kentucky, although the cause was not identified.

The last two weeks of April also saw massive numbers of the Eastern Tent Caterpillar (*Malscosoma americanum*) which feeds on the leaves of the wild black cherry tree. Investigations revealed a considerable number of cherry trees, a source of cyanogenic compounds, in pastures containing mares that had experienced high numbers of EFL and LFL.

Additional equine tissues are being examined to confirm the presence of cyanide. The possibility that caterpillars may be a source of cyanide exposure to horses is being examined in depth. In addition, the investigation of other possible causes including mycotoxins, fungal endophytes, phytoestrogens, chemical compounds, and infectious agents is still underway, although results to date provide no evidence that they are involved in the cause of MRLS. A detailed epidemiological survey of 150 horse farms was begun May 30 to identify contributing risk factors.

Material for this article was provided by publications and bulletins of the University of Kentucky Department of Veterinary Science and the Maxwell Gluck Equine Research Center. For the latest information on MRLS, see the department’s website: www.uky.edu/Agriculture/VetScience/mrls/

Clean transportation vital to biosecurity

Proper cleaning and disinfection of transportation equipment are key components of disease prevention on livestock operations. Producers should focus on this biosecurity measure and make sure hired transportation services do the same.

Dr. Robert Thompson, a veterinarian with PIC USA, Inc., a major swine genetics company, offers the following tips:

- Providing an enclosed, well lit, and heated building for shelter will greatly improve the quality of the washing.
- Federal regulations require all wastewater be captured in an approved holding facility.
- If bedding is used, it must be held until it can be disposed of properly or applied to agriculture land.
- Proper slope for washing out the trailer is necessary. A minimum of 2% to 3% slope to get the wash water to run out is recommended.
- A high pressure washer with hot water is needed. Recommendations are to use a minimum of 2,000 psi with 4 gallons per minute of water.
- An accurate metering device is important in the application of the soap and disinfectant.

Procedures:

1. Bedding and large debris should be scraped out of the trailer before en-

tering the wash area. If no bedding is used, soaking the trailer before washing will reduce wash time.

2. Use of soap is highly recommended to reduce washing time by loosening debris. Normally it is applied on low pressure. Apply soap and water to the outside of the trailer first. Next move inside to the front of the top deck and start the soap application at the junction of the floor and side. Work up the sides from bottom to top to reduce streaking and give more surface contact time. Soak the roof and floor while working to the back of the trailer. Soaking the whole trailer will give plenty of time to loosen debris. However, don't allow the soap to dry or it will be harder to rinse.
3. After soap has been applied to the whole trailer, move back outside and start rinsing and cleaning the trailer from the top down. After rinsing the trailer, soap and wash the cab to give additional soaking time inside the trailer.
4. Rinse and clean each deck from front to back and ceiling down starting with the top deck. Pay special attention when washing to spray the flooring support members on the ceiling of the bottom deck in a multi-deck trailer, behind all the gates, in all the corners, and the inside of the roll-up door.

Unloading ramps should also be washed. During the winter is essential to wash all the winter panels as well as the storage box after every trip. Any time of the year wash and disinfect the cutting boards, paddles, boots, and coveralls after every load.

5. After the trailer has been rinsed inside and out, apply the disinfectant at the appropriate dilution rate. Start on the inside the trailer and finish on the outside. Disinfectant should be applied at low pressure because many metering devices will not dilute properly on high pressure.
6. Clean out the inside of the cab, wash, and disinfect the floor mats.
7. After disinfection, park the truck on a slope so all the remaining water can drain out. During the winter leave the truck in the washout bay, or park it in a protected area to ensure no pooled water freezes up.

Monitoring the quality of the cleaning and disinfection is possible through the use of environmental culture media or ATP tests.

This article was excerpted from a health fact sheet, published by the National Pork Producers Council and the National Pork Board with the cooperation of the American Association of Swine Veterinarians.

Anthrax outbreak possible in N.D.

Continued from page 3

day 8 (July 3) after onset of symptoms (June 25). Both specimens tested negative. Because these specimens might have been collected too early for development of detectable antibody, a third serum specimen was collected on day 22 after onset of symptoms (July 17) and was tested side by side with the specimen collected on day 8. Test results showed a greater than fourfold rise in titer, from negative to 1:400. A fourfold or greater rise in titer is considered diagnostic for *B. anthracis* infection.

Anthrax is an acute infectious disease caused by the spore-forming bacterium *Bacillus anthracis*. Anthrax infection can be

spread through inhalation, ingestion or cuts in the skin. It often results in sudden deaths of infected animals. Symptoms include difficult breathing, swellings under the skin and bleeding from orifices. Untreated cattle die within 24 to 48 hours. Heavy losses can occur if cattle are left untreated and unvaccinated.

State health officials have said there is little chance of human exposure to the disease. Isolated cases of anthrax in animals are reported almost every year in North Dakota, but there has been no human case of anthrax here since 1978.

Veterinarians should nevertheless take measures to minimize the risk of exposure to themselves when examining animals in cases in which anthrax is a possibility.

Sheep tagging program nearly in place

Although neither the final rule nor a supporting document called the Uniform Methods and Rules (UM&R) have been published in final form, most of the procedures are in place for an individual animal identification system for interstate movement of sheep and goats designed to support a national effort to eradicate scrapie in the U.S.

Here are the highlights of the draft UM&R for scrapie eradication, published April 20 in THE FEDERAL REGISTER.

ID tags will be required for all breeding sheep, all sheep over 18 months of age, all exposed, suspect, test positive and high-risk animals and breeding goats, except low risk commercial goats. USDA will provide tags, without charge, to producers. Tags will be available through the USDA Veterinary Services area office and/or the state veterinarian's office in each state. Tag pliers will also be provided to each producer who requests tags during 2001.

Producers who prefer to use a different type of tag may purchase official tags through specified, approved tag companies. A list of approved companies will be maintained on the internet at: www.aphis.usda.gov/vs/scrapie/. These tags may also have any other printing, such as the farm name, desired by the producer as long as the required printing remains legible and distinct.

Metal tags are preferred because of their low cost and durability; however, plastic tags may be provided when requested for use in breeding animals and goats.

Producers and other stakeholders should also be aware of the following items:

Voluntary Flock Scrapie Certification Program (VSFCP) identification qualifies as official identification for interstate movement.

Premise only identification is allowed for limited uses such as grazing and low risk

commercial flocks using registered brands.

Individual registry tattoos issued by breed associations may be used as official identification if a copy of its registration certificate accompanies the animal. Holders of registry assigned tattoo prefixes should have these linked to their premises in the national scrapie database through their local USDA Veterinary Services area office.

It is anticipated that some breed registries will request blocks of serial numbers for use as registry numbers or as tag ID numbers linked to registry numbers through the American ID system that is currently being developed.

The final rule and UM&R are expected to be finalized in August, and will go into effect about 90 days later.

The draft UM&R may be viewed at www.animalagriculture.org/scrapie or www.aphis.usda.gov/vs/scrapie/.

