

# Animal Health News

News for Veterinarians from the North Dakota Board of Animal Health

## BOAH orders quarantines, testing on sheep, bison

BISMARCK -- The North Dakota Board of Animal Health has quarantined a herd of bison and a flock of sheep after learning of potential disease threats from the animals.

Meeting March 11, the board ordered the bison herd tested for tuberculosis and brucellosis when it learned that some of the animals had been brought into the state without a health certificate. One animal was classified as suspect when the group was being tested for export to Canada. The case has been turned over to local prosecutors.

The sheep were quarantined because scrapie was positively identified in the flock. Further epidemiological testing is being conducted in both cases.

The board lifted the quarantine on approximately 50 stolen dairy cattle that had also been brought into North Dakota without health certificates. The cattle had been stolen in South Dakota. A South Dakota dealer in turn sold them to five North Dakota dairy producers. The case is under investigation in South Dakota.

The board appointed Dr. Charles Stoltenow, North Dakota State University Extension Service veterinarian, as interim consulting veterinarian to the board on the retirement of Dr. Herb Smith.

The board approved a memorandum of understanding with the State Game and Fish Department concerning the use of immunocontraceptives, the relocation of free ranging wildlife and on shared responsibilities of the two agencies.

In other action, the board :

- Sent a letter to the state's congressional delegation expressing their concerns over Senator Thomas Harkin's bill regarding animal confinement operations
- Determined that health certificates will not be required for in-state cattle at the North Dakota State Fair.
- Reviewed a research proposal dealing with surveillance of elk and deer for chronic wasting disease (CWD).
- Took under advisement a request for importation of an opossum into North Dakota.
- Approved a meeting for modified live vaccine outlet certification in December in conjunction with a trade show.
- Received a report of an illegal importation of a Canadian lynx. The case has been turned over to local prosecutors.

### *Upcoming meetings*

**The North Dakota Board of Animal Health** will meet at 9 a.m. CT, Wednesday, June 10, in the Peace Garden Room of the State Capitol in Bismarck.

**The North Dakota Nontraditional Livestock Advisory Council** will meet at 9 a.m., Thursday, May 14, in the Fort Totten Room of the State Capitol, Bismarck.

For more information on these meetings, please call the Board of Animal Health at (701) 328-2654.

## Tests find no sign of TB infection

The testing of almost 500 head of cattle for tuberculosis has been completed with no signs of infection in two North Dakota herds.

The testing followed the discovery that the cattle may have come into contact with seven feeder heifers from an infected herd in Rosburn, Manitoba. Canadian officials depopulated the Manitoba herd. Autopsies revealed about half of the animals had lung lesions.

The seven heifers in question were later included in a group of 82 cattle that were sold through a South Dakota auction market last September. South Dakota officials are currently tracing the buyers.



## Animal Health News

is published by

The North Dakota  
Board of Animal Health

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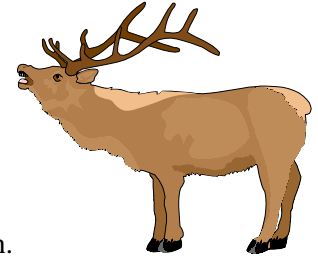
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Ted Quanrud, Editor



# CWD reported in Nebraska elk herd

Another case of chronic wasting disease (CWD) in a captive herd has been reported. The most recent is in western Nebraska, where the disease was detected in a domestic elk herd. This is the third case of CWD diagnosis in a captive herd.



Nebraska officials are planning a meeting to determine how the state will deal with the situation.

REMINDER: North Dakota currently has mandatory surveillance of elk deaths, and also requires several statements regarding CWD on health certificates for imported elk. The health history of the herd of origin for the past 2 years is also required prior to receiving a permit number.

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## News in brief

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### AVIC retires

Dr. Irwin Huff, Bismarck has retired as the area veterinarian-in-charge for North Dakota for U.S. Department of Agriculture, Animal and Plant Health Inspection Service, Veterinary Services.

The North Dakota Board of Animal Health thanks Dr. Huff for his services, and wishes him well in the future.

Dr. Eldon Halverson, Bismarck, is now the acting AVIC.

### Deer tick reported

The National Veterinary Services Laboratory has confirmed the identification of a deer tick (*Ixodes damini*) collected from a dog near Belcourt in Rolette County. The deer tick is the primary vector of *Borrelia* that causes Lyme disease. This tick was last reported in North Dakota in 1989 in Grand Forks County.

### Corrections

There was an omission in our first quarterly newsletter.

The Board of Animal Health has

dropped the tuberculosis and brucellosis test requirements on meat and hair goats, but the same tests are still required on milking goats.

### Equine entry rules

Also in the listing of state requirements for equine imports on Pages 5 and 6, the entry for Nevada should read: Detailed ID of animal is not required. Negative Coggins Test in the last 6 months with test date and accession # and lab included.

The entry regulations for Arizona should read: Negative Coggins Test within 12 months of entry on any equine 6 months or older. Health certificate requirements include individual ID by age, sex, breed, color, name, brand, tattoo, scars, the EIA test results, date, name of testing laboratory and laboratory accession number.

### Phone number

The toll-free number for the North Dakota Department of Agriculture, the Board of Animal Health and the State Veterinarian's office is (800) 242-7535.

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# What is your diagnosis?

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You were called early one Monday morning to a client's farm that has a swine operation. It is a farrow to finish operation that has about 200 sows. The producer sounds somewhat frantic on the phone and tells you he has about 50 dead pigs and many more that appear ill. You had just talked to him a few days ago about his trip to the Caribbean and everything sounded fine then.

When you arrive at his place, you are struck by how sick the pigs look and act. Some of the pigs are drowsy and inactive and stand with an arched back. Other pigs stand with drooping heads and straight tails. There is yellow vomit stained with bile dispersed throughout the pen. Most of the sick pigs are huddled in a pile. You check a few temps and find them ranging from 104 to 108. They are not eating and the stools range from hard to watery diarrhea. Many pigs have red crusty eyes. They are gaunt and have a weak staggering gait related to posterior weakness. Some animals are down and convulsing.

You perform a postmortem exam on a few pigs. Externally there is a purplish discoloration of the skin. You find some lymph nodes in the head and neck that are edematous and hemorrhagic. The surface of the spleen, especially the edges, has raised, dark wedge-shaped areas. There are ecchymotic hemorrhages on the surface of the kidney, large and small intestine and heart, and a straw-colored fluid in the abdomen, thorax and pericardial sac. The lungs are congested and hemorrhagic.

A thorough history should be taken. Observe clinical signs and necropsy lesions and record them! Necropsy 4 or 5 animals to increase the probability of observing characteristics.

Collect diagnostic specimens — including tonsils, maxillary and mesenteric lymph nodes, spleen, kidneys, and distal part of the ileum. If live pigs are available, tonsil biopsies and whole blood collected with anticoagulants are useful.

Target sampling pigs with fevers and those showing signs of disease.

Put samples in separate, labelled bags.

Don't freeze, but refrigerate.

Send to lab in leak-proof containers!

IF you have no clue what you're dealing with, but the necropsy lesions are unlike anything you've ever seen before, it would be prudent to visit with the lab about the history of the case. **Alert the state veterinarian or the AVIC (area veterinarian in charge).**

Ruleouts may include swine fever, salmonella, and even erysipelas.

## What's your diagnosis?

(Answer on Page 7)

# Epithelioma can mean trouble at slaughter

Epithelioma or cancer eye is nothing new to large animal practitioners. The disease is fairly common and often treatable, but many veterinarians and their clients are unaware that animals that have been treated for epithelioma are handled differently at the slaughterhouse.

Dr. Jeffrey T. Legg of U.S. Department of Agriculture Food, Safety Inspection Service offers the following information and recommendations when dealing with animals that have been treated for epitheliomas and are destined for slaughter or with the carcasses of such animals.

- Any bovine with an eye or associ-



ated structure missing shall be handled as suspect.

- Absence of an eye or associated structure in mature cattle may indicate surgical removal of epithelioma. The head of such a carcass must be condemned. Head, viscera, and

carcass shall be thoroughly examined for metastatic lesions and, if present, the entire carcass will be condemned.

- Carcasses of animals affected with epithelioma of the eye, or the orbital region shall be condemned in their entirety if one of the following three conditions exists:

1. The affection has involved the osseous structures of the head with extensive infection, suppuration, and necrosis;
2. There is metastasis from the eye, or the orbital region, to any lymph node including the parotid lymph node, internal organs,

**Continued on page 7**

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# Communicable disease update

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## Scabies

Scabies has been recently identified in Las Anamas County, Colorado. The affected animals have been identified and treated. The state's livestock division director reports the situation is under control. Cattle originating in Colorado, Texas or New Mexico must be injected with an approved avermectin within 14 days of importation to North Dakota.

## Vesicular stomatitis

The vesicular stomatitis outbreak is over. As of Dec. 15, 1997, all quarantines for the disease were lifted. North Dakota does not currently require a VS statement from any state.

## PMWS

Post-weaning multisystemic wasting syndrome (PMWS) has been reported in Ohio. PMWS is a disease of nursery and grower pigs associated with prolonged weight loss, generalized lymph node enlargement and death. Congenital tremors may be seen in newborn pigs also. Originally reported in Canada in 1991, the disease has since been reported in California, Iowa, Illinois and Indiana.

## Pseudorabies

A case of pseudorabies has been confirmed in a Minnehaha County, South Dakota, farrow-to-finish hog operation. The county has now reverted to Stage III status.

## Contagious equine metritis

An organism resembling that which causes contagious equine metritis (CEM) has been reported in Sacramento County, California. The isolate came from a mammoth jack donkey, and was incidently found during testing semen for export. Although the report involves only the isolation of an organism resembling *Taylorella equigenitalis* and there is no evidence of clinical disease in the jack or in other potentially exposed animals, a thorough epidemiological study is being conducted. For more information, call the California Department of Food and Agriculture, Animal Health Branch, at (916) 654-1447.

## Avian influenza

On February 25 and 26, 1998, two new cases of H7N2 avian influenza were diagnosed in Lancaster County, Pennsylvania. Both are layer flocks (200,000 birds and 135,000 birds). One of the flocks is in the previous area of general quarantine and is on a farm which had been previously infected, depopulated and subjected to a Department-monitored cleaning and disinfection. The other flock is located several miles south of the previous area of general quarantine. With the addition of these two cases, there are now four existing premises/flocks (all are in Lancaster County) which are quarantined because of infection with the H7N2 influenza virus. One of the "older" quarantined premises is a seven-house (six houses are occupied) complex in which infection has seemed to persist since July 1997. This premises is scheduled to be completely depopulated within the next month. It is anticipated that the other "older" quarantined premises will be depopulated in late April 1998.

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# Veterinarians' Forum

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## Continued from page 8

### DOGS

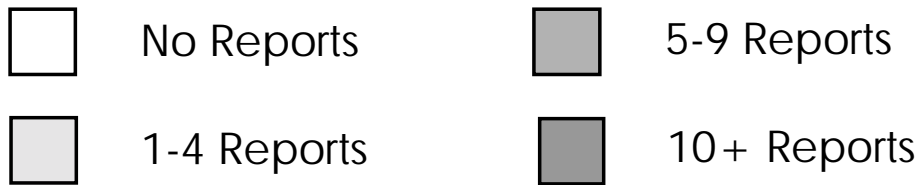
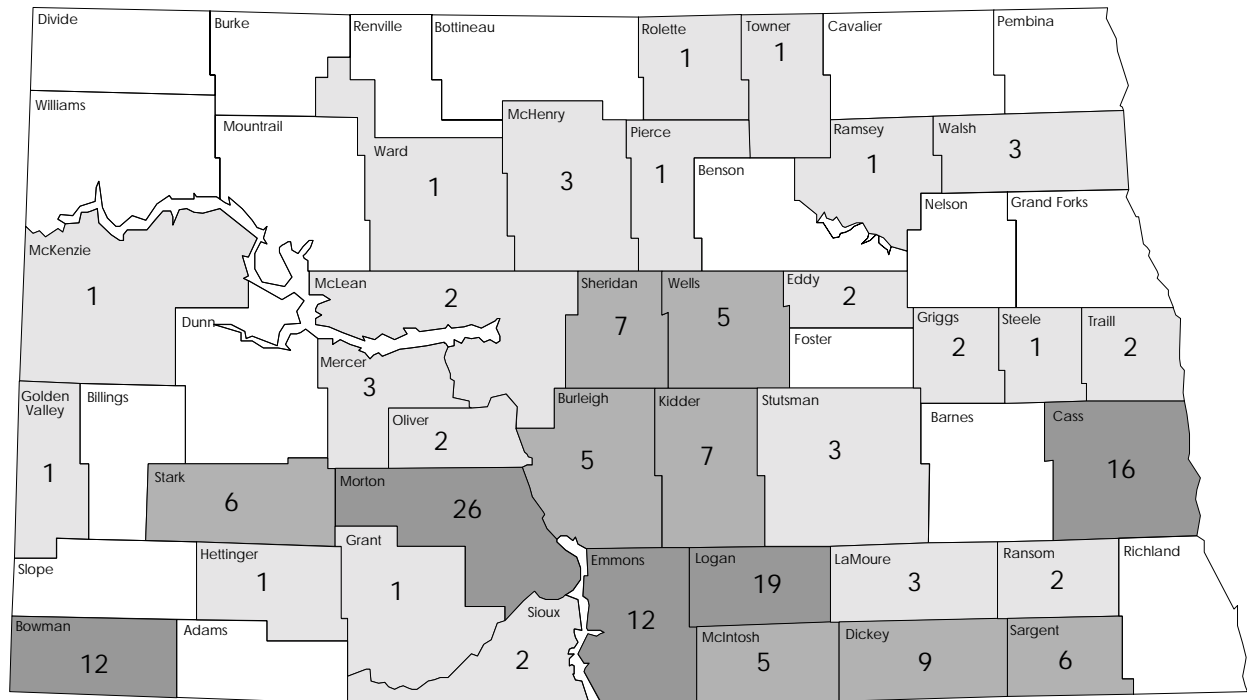
Year 1 CDV, CPV-2, CAV-2, rabies  
Year 2 Intranasal CPI-B. bronchiseptica with or without CAV-2  
Year 3 Rabies  
Year 4 CDV-CPV-2 Or CDV, CPV-2, CAV-2, CPI  
Year 5 Repeat Cycle

### CATS

Year 1 FPLV, FCV, rabies, Feline herpesvirus  
Year 2 Feline herpesvirus-FCV  
Year 3 Rabies  
Year 4 FPLV  
Year 5 Repeat cycle

\*Other components could be given if you determine they are needed for a specific patient.

# 1997 Location and Number of Reported Johnes Disease Cases



• 55 Beef Cattle • 65 Dairy Cattle • 2 Goats

## Attention:

### Dairy producers

If you need a copy of the **Milk and Dairy Beef Quality Assurance Program and Residue Prevention Protocol Producers Manual**, write or call:

Dairy Quality Assurance Center  
801 Shakespeare Avenue  
Stratford, IA 50349  
Phone: (515) 838-2793

Cost is \$7 for the first copy and \$6 for each additional copy, plus shipping.

## Wyoming starts sheep certification program

The Wyoming Livestock Board has established a Wyoming Sheep Quality Assurance Program (WSQAP) through which sheep producers can certify their flocks as free of *Brucella ovis*, scrapie, ovine progressive pneumonia and infectious footrot.

Advising the board on the provisions and implementation of the new program will be an advisory panel consisting of two purebred sheep producers, two commercial/range sheep producers, a sheep feeder, an accredited veterinarian or academic professional with a major emphasis in the study and science of ovine production, an ovine industry group representative, the state veterinarian or appointee and the U.S. Department of Agriculture federal veterinarian for Wyoming.

The advisory panel will not have any regulatory authority and will serve on a voluntary basis.

# Understanding drug labeling

## *Help your clients keep on top of FDA regulations*

Because livestock and dairy producers are ultimately responsible for any drug residues in their animals, they should be familiar with drug labeling requirements. Veterinarians can provide their clients with an invaluable service by helping them understand and follow these requirements.

Here are some of the key points to go over with your clients:

It is important to remember that usage of an over-the-counter (OTC) drug in a manner different than stated on the label is considered an “extra-label” use. Extra label usage does not pertain to feed additives.

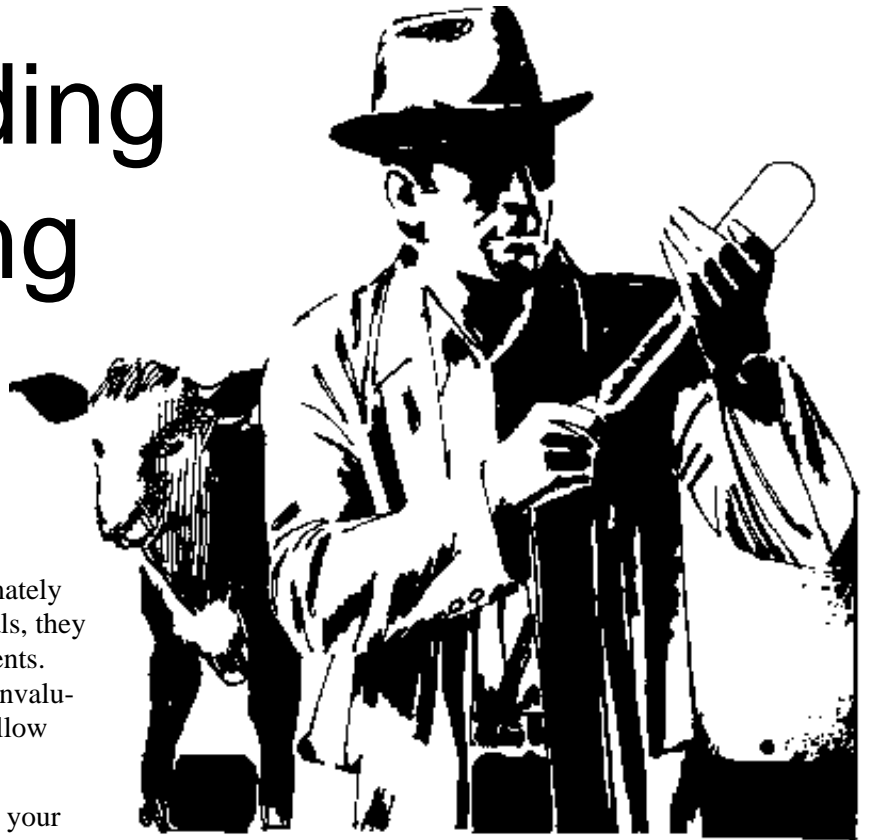
OTC drugs must contain the following information on the label:

- Name of the drug
- Active ingredients
- Directions for use
- Withholding/withdrawal times
- Name of the manufacturer or distributor

Prescription (Rx) drugs must contain this information on the label:

- Name of the drug
- Withholding/withdrawal times
- Active ingredients
- Directions for use
- Any special cautionary statements
- Name and address of the dispensing veterinarian, not just the clinic.
- The statement “CAUTION: Federal law restricts this drug to use by or on the order of a licensed veterinarian.”

Drugs to be used in an “extra-label” manner require additional caution. Because they are prescribed for a particular animal or a particular herd by a veterinarian who is familiar with the animal or herd, they often have special instructions. The labels for drugs used in an



“extra-label” manner must have these components:

- Name and address of the veterinarian dispensing the drug
- Active ingredients
- Directions for use as specified by the veterinarian (for example, dosage, class of animals, disease conditions, duration of therapy, I.D. number of animal).
- The veterinarian’s prescribed withholding time
- Name of the owner or farm and identification numbers
- Any special cautionary statements (Example: A requirement to test milk or urine for residues prior to shipment, not for use in pregnant cows, etc.)

You can provide your clients with a service checking his/her drug storage area. Which, if any, of the drugs used in an “extra-label” manner on the farm do not meet these requirements?

### IMPORTANT

Your clients should know that ignorance of labeling requirements is not a defense if milk or meat from one of their animals is found to contain violative drug residues.

## Lots of testing, but little brucellosis

The following information from the U.S. Department of Agriculture shows that a lot of cattle are tested, but very little brucellosis is being found.

### 1997 Market Cattle Testing in U.S.

|                            |              |
|----------------------------|--------------|
| Total tests                | 11.9 million |
| Tests at slaughter         | 7.0 million  |
| Tests at markets           | 4.9 million  |
| Total market test reactors | 2,388        |
| On-farm reactors           | 407          |
| Infected herds found       | 54           |
| Existing infected herds    | 13           |

# Epithelioma

## Continued from page 3

muscles, skeleton, or other structures, regardless of the extent of the primary tumor; or

3. The affection, regardless of extent, is associated with cachexia or evidence of absorption or secondary changes.

• Carcasses of animals affected with epithelioma of the eye, or the orbital region, to a lesser extent than described above may be passed for human food after removal and condemnation of the head, including the tongue, provided the carcass is otherwise normal.

It is an unwritten policy that a cow with the parotid gland removed on the same side that an eye was enucleated is automatically condemned because that gland is necessary to verify that the cancer hasn't metastasized.

NOTE: Kansas and Colorado have laws which prohibit the public sale of animals affected with specific conditions such as severe lump jaw, advanced cancer eye, fractured long bones, debilitating lameness, and diseases not responding to treatment which have resulted in extreme loss of body condition.

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## What is your diagnosis?

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### CONTINUED FROM PAGE 3

#### — Answer: The diagnosis is HOG CHOLERA —

Although hog cholera has been eradicated in Australia, Canada and the United States, we must constantly be aware of preventing the potential transmission of this highly contagious disease. If you suspect HC in a herd, immediately take appropriate precautions in order to decrease the transmission to other herds in the area. The “72-hour rule of thumb” should immediately be implemented. That means as a practitioner, you should not go onto another swine premise for at least 72 hours. Introduction of infected pigs is the principal source of infection in HC-free herds, but it can be carried on fomites. The pig is the only natural reservoir of HC and transmission occurs mostly by the oral route though other means are possible. Aerogenic transmission is not thought to be important in the epizootiology of HC but it could conceivably occur between mechanically ventilated units within close proximity to each other.

The introduction of possible sources of the contagion, needs to be monitored. Disinfectants should be used such as lipolytic agents including ionic and non-ionic detergents will denature the virus by their effect on its lipoprotein envelope. The virus is also sensitive to

desiccation and is rapidly inactivated at pH values below 4 and above 11. A variety of proprietary disinfectants will readily inactivate HC, however, prior approval of disinfectants may be required from the local environmental protection agencies.

Hog cholera is virtually out of control in Haiti and will persist in the Caribbean for years to come. Vaccine, effective in controlling the clinical signs, has been used in the country. A five-year regional approach to eradication from the affected Caribbean countries has been proposed. The first two years would involve control by vaccination, although the strategy for its use is not clear. The US response includes increasing inspection of passengers from the Dominican Republic to 100% and seizure of any pork or pork products. APHIS officials continue serological testing of U.S. hogs in areas considered higher risk. Spanish-speaking APHIS veterinarians have been sent to assist the Dominican government in controlling HC. A team of veterinarians will help the Dominicans develop an eradication plan and assist in training. APHIS labs have provided diagnostic training, reagents, and other assistance to the national laboratory.

It appears that HC will persist in the Caribbean for years to come. Given the trend to regionalization, the U.S. must be prepared to continue assisting and protecting its swine from the threat.

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# Veterinarians' Forum

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One of the most controversial topics today, is that of the relevancy of the current vaccination protocols.

Vaccination is not to be considered an innocuous procedure. There may be consequences to the patient and the owner. Owners also do not wish to incur economic hardships when a vaccine is of limited or no value nor do they wish to jeopardize their pet's health due to an inadequate vaccination program.

An article in the March issue of The Compendium discusses all of the questions our profession is facing associated with vaccinating. Those questions include:

1. What is the purpose of a vaccination program?
2. What is the earliest age to vaccinate?
3. How often should vaccines be given to young puppies and kittens?
4. Which vaccines are necessary for dogs and cats?
5. What type of vaccine should be used?
6. Which route of vaccination is most effective?

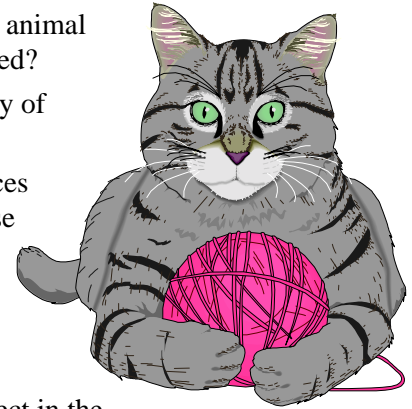
7. How often does an animal need to be revaccinated?

8. What is the efficacy of current vaccines?

9. What are the chances that vaccine will cause disease?

10. Are vaccines being used that aren't needed?

11. What can we expect in the future?



The article states "the study that will definitively answer many of the questions posed here can never be done."

The article included the following proposed revaccination schedule for dogs and cats:

**Continued on page 4**