

West Virginia Department of Agriculture
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WEST VIRGINIA DEPARTMENT OF AGRICULTURE
GUS R. DOUGLASS, COMMISSIONER

Animal ID Moos...

March 2007
Volume 1, Issue 4

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If you have sent in your
Premise ID form and
have not received your
Premise ID number in
the mail, please call the
Animal Health Division
at 304-558-2214.



Questions?
Please Contact the
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Over 65% of West Virginia Livestock Premises Have Been Registered

The West Virginia Department of Agriculture (WVDA) has been working very hard to inform and educate producers about the importance and added value the Animal ID Program will bring to their farming operations.

West Virginia producers have been very accepting of the Premise/Farm ID Program. They understand the importance of the program from the animal health standpoint and the bene-

fits available from NAIS.

The USDA has announced that the National Animal Identification System is **voluntary**. But whether voluntary or mandatory, it is a value-added tool for the producers of West Virginia.

Last fall the West Virginia Beef Quality Assurance Calf Pools sold all their calves through the Ag Infolink PVP (Process Verified Program).

This program is a USDA Source and Age Verification Program.

West Virginia producers received premium prices for these source and age-verified calves. The calves were eligible for foreign market trade. West Virginia Calf Pools will continue to market their calves through these types of source and age verification programs.

From the Desk of Dr. Joe Starcher, State Veterinarian

Hello again,

Today was interesting. I talked to one person about the evils of NAIS and read an article from the rabbit growers on the same subject. This is the first time rabbit growers have come up.

After finishing our fall feeder calf sales, the blizzards in Colorado, the Equine Herpes Virus (EHV) mini outbreak in Virginia and Maryland and the voluminous preparation that I have gone through for an Avian Influenza outbreak, I am more convinced than ever that the National Premise Identification System and the subsequent tracking components are vital to the continual success of our agriculture system.

Ranches were identified and supplied emergency feed through the GPS coordinates used in the Premise ID system in Colorado. The EHV outbreak was plotted and surveillance

was enhanced by knowing the location of the equine farms in Virginia and Maryland. That is still ongoing, although winding down, as I write this. The West Virginia Department of Agriculture knows where most of the commercial poultry operations are located in our poultry producing areas.

Not once, I REPEAT, not once has that information been given to any outside group. Also, not once has anyone asked for it either. We are committed to the confidentiality of your information you submit. Those of you who have signed on have nothing to worry about.

Let's review the application: name, address, phone number, what type of animals are on your farm and what type of a business plan you have. Let me explain that last question – business plan. This form is used nationally. If you are a large corporation with stock holders, your information is not confidential. Purina, Cargill, etc.

Small farmers like you and I are exempt from freedom of information requests. So quit wor-

rying! And remember about 90% percent of the anti-NAIS comments I hear are incorrect.

WVDA's Animal Health Division is trying to get a handle on the livestock dealer activity in West Virginia. We are doing this for two main reasons: We want you, the producer, to be protected when dealing with livestock dealers and because of the potential for the rapid spread of diseases, it is important to have an idea of the movement system within our state.

We assumed that most dealers are bonded and licensed. We are finding that is not always the case. Premise identification is the heart of any movement issue. We need to be able to scientifically follow a trail of movement should there be a disease issue. Premise ID registration gives us that means. This program is designed to help and protect America's Agriculture.

Thanks to all of you, our Premise ID system continues to expand. I appreciate the confidence you have in YOUR West Virginia Department of Agriculture and our continuing efforts to improve the lot of West Virginia farmers.

BVD, cont. from page 3

The most severe epidemic outbreaks tend to occur in naive herds that have had BVD virus recently introduced. The virus may be introduced by purchasing a cow carrying an infected fetus, or by purchasing a persistently infected animal before it has developed mucosal disease.

Prevention and Control:

The cornerstone of prevention and control programs for BVD virus and mucosal disease is a vaccination pro-

gram and practicing biosecurity measures. Disease trace back can be made easier with proper ID of cattle. Vaccinations are an integral part of any control or eradication program, but alone will not control the disease.

Your local veterinarian should be consulted before undertaking any vaccination or control program. Proper and safe immunization of cattle with either inactivated or modified live virus vaccines requires adherence to the manufacturer's instructions.

Each year, the replacement heifers and breeding cows should be vaccinated prior to breeding with the vaccine recommended by your veterinarian. It is important to remember that vaccination will not cure persistently infected animals.

Testing for BVD Virus

Control of BVD infection requires effective use of laboratory diagnostic tools to detect BVD virus and then to eliminate persistently infected animals.

Backyard Flock, cont. from page 2

West Virginia Department of Agriculture (WVDA) State Veterinarian Joe Starcher noted that cattle producers in West Virginia have embraced the system, which helps to improve the marketability of state cattle.

"I think a lot of people see this as an issue for the 'big producers', but it's every bit as important for the small farmer. With better information, we could have contacted these bird owners directly to pro-

vide them with information on the situation and how to protect their birds," said Dr. Starcher. "West Virginia leads the nation in the percentage of family-owned farms. Our goal is to protect those farmers as much as it is to protect our commercial industries."

Dr. Starcher added that the only information requested for the PID program is name, mailing address, phone number, physical location (such as GPS coordinates – determined by WVDA), and types of animals on the farm. The form also requests the farm's business structure – which only mat-

ters if it is a publicly traded corporation.

Publicly traded corporations are subject to disclosure rules by the Securities and Exchange Commission. Data provided by small farms participating in the PID program is held in strict confidence by the WVDA. "I can't imagine why anyone other than us would want it to begin with," Dr. Starcher said.

To register - or for more information - visit www.wvagriculture.org and click the "Animal Health" link, or phone 304-558-2214.

National Animal Identification System Proves to be a Valuable Tool During Blizzard Recovery Operations

Phone calls directly to ranchers in southeast Colorado helped evaluate the safety of those ranchers' families and the well-being of Colorado livestock during the blizzard recovery operation. This process was made possible by the National Animal Identification System (NAIS).

Those with registered premises were contacted by the Colorado Department of Agriculture's State Veterinarians Office. NAIS allowed the Department to find out if animals had access to feed.

"Starvation and dehydration are certainly animal health concerns and we are pleased that we could utilize the system in the emergency situation," said State Veterinarian Dr. John Maulsby.

Emergency hay drops began when the decision was made to utilize NAIS in the six counties hit hardest by the storm.

"Having direct access to livestock owners gave us the opportunity to quickly assess the situation," said Colorado Division of Emergency Management Director,

George Epp. "Protecting the health of Colorado livestock is a top priority to this operation and NAIS was a big help."

Aerial surveillance searched for additional herds; meanwhile, the Colorado and Wyoming National Guard performed hay drops to get feed to stranded livestock. At least 70 tons of hay had been delivered by helicopters and a C-130 military transport plane. Generators were utilized to help communities without electricity to pump water. Large tankers were also used to deliver water to necessary locations.

Commissioner Douglass Urges Backyard Flock Owners to Register Premises

West Virginia Commissioner of Agriculture Gus R. Douglass is urging more owners of "backyard flocks" to register their farms in the state's premise identification (PID) system in the wake of an incident involving low-pathogenicity avian influenza (AI) at a Pendleton County farm.

"When setting up our surveillance zones around the affected farm, we had no difficulty locating the commercial flocks within a six-mile radius of the affected farm because the poultry companies operating in the area know where all the houses are," said Commissioner Douglass.

"But we had no idea about the number and location of smaller farms with poultry. This made our response effort much more difficult than it needed to be in that we had to devote vital personnel to literally driving every road in the area to look for farms with poultry," he continued.

Four employees spent three days visiting 156 residences, 17 of which had birds. Only two of those farms had premise identification numbers.

Testing of so-called backyard flocks is part of the U.S. Department of Agriculture's program to reassure foreign trading partners that any AI outbreak in this country has been thoroughly eradicated.

"The ability to put those small farms on a map would have greatly assisted us at the outset of this incident, spared valuable manpower for other duties and saved the taxpayer quite a few dollars," Commissioner Douglass said. "Our goal through all of this was to protect the local economy in the Eastern Panhandle, which benefits everyone in that area, not just commercial poultry producers."

Four employees spent three days visiting 156 residences, 17 of which had birds. Only two of those farms had premise identification numbers.

Backyard Flocks, cont. on page 4

Pocahontas Producers Co-op to test RFID Technology

West Virginia University Extension Service, along with the West Virginia Department of Agriculture and Pocahontas Producers Co-op. Association (PPCA), are planning a pilot test project for the National Animal Identification System. This pilot project is to test the use of Radio Frequency Identification (RFID) in a commingled, graded feeder calf sale.

WVU Extension Service and the West Virginia Department of Agriculture have been using RFID technology with local calf pools throughout the state; the next step is to incorporate this into the more traditional marketing channels.

Pocahontas Producers Coop. Association, located in Marlinton WV, has agreed to participate and help fund this pilot project. Using RFID technology gives the ability to trace an animal through the entire marketing channel within 48 hours in case of a disease outbreak.

During the pilot test project cattle will be tagged with an RFID tag during normal processing at the PPCA. These numbers will be recorded and linked to the back tag system that the stockyards currently use. Each buyer will be provided with a list of RFID tag numbers that he purchased.

This information does not differ from what buyers are already receiving, except

This project is in preparation for the NAIS but may allow the Pocahontas Producers Coop Assoc. to provide an opportunity for producers to market source and age verified cattle. Source and age verification would allow producers to market their cattle for a premium in today's marketplace.

If you would like any additional information on this pilot project contact Fane Irvine, Pocahontas County Extension Agent at (304) 799-4852.

Bovine Virus Diarrhea (BVD)

Bovine Virus Diarrhea (BVD) is a devastating disease of cattle. The disease reduces productivity and increases death loss of cattle. Clinical signs of mucosal erosions and diarrhea have obvious impacts on infected animals, but more devastating are those animals that do not live up to their potential through lower weight gains, increased disease susceptibility, and diminished reproductive performance. Bovine virus diarrhea (BVD) causes a wide variety of clinical disease syndromes in cattle including infertility, abortion, and congenital defects in calves. A syndrome known as mucosal disease, which is also caused by BVD virus, can produce high mortality in calves and yearling cattle.

The major source of BVD infection is persistently infected animals (PI's). PI's result from cows being exposed to the virus during pregnancy and the fetal calf becoming infected. Although typically these calves show no signs of illness themselves, they shed the virus in such great numbers that even well-vaccinated animals may become infected.

Outbreaks of some of these syndromes can have devastating economic consequences to the cattle producers. The different ways in which BVD virus can cause disease are complex, and new manifestations of this infection have made understanding this disease even more difficult.

BVD virus may also play a role in the development of bovine respiratory disease. The immunosuppressive effects of this virus have been well documented.

Transmission:

The BVD virus is not capable of prolonged survival in the environment, and therefore direct contact between animals is necessary to pass the virus from one animal to another. Infected animals can shed the virus from discharges from the mouth, nose, eyes, milk, and placenta prior to birth. Some of the highest virus concentrations are found in the manure of infected animals with diarrhea. Infected bulls can also spread the virus via their semen.

Diseases resulting from Fetal Infection

Infection of the non-immune pregnant cow, resulting in an infection of the

fetus, produces a number of different manifestations depending on the age of the fetus (or the stage of pregnancy) at the time of infection. Very early gestation (<40 days), the infection may result in early embryonic death and infertility of the cow, or abortion of the fetus. During the next stage of gestation (40-120 days), the immune system of the calf is developing. If the fetus is infected during this time period, the calf may be born normally, but the calf's immune system will not recognize the BVD virus. Therefore the calf has become "immunotolerant" to BVD virus and will be a permanent carrier of the virus during its lifetime. Some of these calves will be stunted, weak or stillborn, but many of these calves may be clinically normal. These hidden carriers of the virus are called persistently infected calves and are a major source of the BVD virus and will shed the virus.

The syndrome known as Mucosal Disease occurs when one of these persistently infected calves comes into contact with another strain of the BVD virus or when the virus they are carrying undergoes a particular mutation. Mucosal disease usually occurs between 6 and 18 months of age but can appear at any age. Animals with mucosal disease are off feed, depressed, and often have a nasal discharge and excessive salivation due to erosions and ulcers in the nose and mouth. The nose and muzzle may have a burnt or peeling appearance because of the extensive erosions and ulceration.

These ulcers may also be present at post-mortem in other parts of the digestive system such as the esophagus, stomach and intestines. These intestinal lesions result in a foul smelling, watery diarrhea.

The calves often have a fever and become dehydrated as well. Lameness may be present because of ulcers around the hooves. Many of the animals with mucosal disease will die within a few days.

Occasionally a more chronic form of the disease is evident with chronic weight loss, intermittent bouts of diarrhea or pneumonia and chronic lameness. These animals often die of pneumonia or some other disease because of their weakened immune system. If these persistently infected calves survive until

breeding age without contracting mucosal disease, they can become pregnant and will give birth to calves that are also persistently infected.

If the fetus is infected between 120-180 days of gestation, the result can be calves born with congenital defects, which affect the part of the brain controlling balance and coordination. These calves will have difficulty walking and may also have deformed legs, cataracts and blindness. It has also become apparent that some strains of BVD virus can cause a "bleeding syndrome" to occur in immunocompetent animals. These animals will have bled into their eyes causing them to appear blind. They will also bleed profusely from injection sites.

Treatment:

There are no specific treatments available for any of the forms of BVD infection. Virtually all persistently infected cattle will eventually die from mucosal disease. Animals that are immunocompetent, and are infected after birth, either as a calf or as an adult, can survive clinical disease (depending on the severity of the infection) and may require supportive therapy such as fluids and antibiotics.

Immunity and BVD Virus:

Immunity to BVD virus can occur through natural exposure to the virus or via vaccination. Cattle breeding herds can be grouped into four categories based on their immune status and the presence or absence of persistently infected animals.

a) Naive herds: Herds with no previous exposure to BVD virus and with no vaccination history for BVD

b) Epidemic herds: Naive herds in which the virus has recently been introduced at the critical time to produce a large number of persistently infected animals.

c) Endemic herds: Unvaccinated herds, which have had natural exposure for some time to BVD virus.

d) Immune herds: Herds, which have been vaccinated routinely for BVD virus and all of the breeding females, have some degree of immunity against BVD virus.

BVD, cont. on page 4