We are thankful for our partnership with all of you and certainly appreciate the cooperative and collaborative spirit that we share with you. In addition, we truly enjoy our interaction and common goals that we share – animal health & well-being. Thank you for your continued efforts!

State Veterinarian’s Office of Colorado

Summary of Items in this e-News:

- **Welcome to New Staff Members:** Animal Industry Division of the Colorado Department of Agriculture has new staff members who will be interacting with you in various ways! [Click to read more](#)

- **What is an e-VET?:** Animal Industry Division staff attended the Colorado Veterinary Medical Association’s convention on September 16th in Keystone, CO to present new electronic methods for issuing inter-state health certificates in the movement of livestock across state borders. [Click to read more](#)

- **Annual Foreign Animal Disease (FAD) Course at CSU:** This year’s course was again well attended by Colorado veterinarians and delivered excellent content through world-class speakers. If you have not ever attended, contact Nick Striegel to get on the list for next year’s course. [Click to read more](#)

- **Dairy Crisis Drill & Exercise:** Dairy Management Inc. (DMI) held a national dairy crisis drill in Denver on August 17th and 18th in which the State Veterinarian’s Office participated. For nearly 10 years, the dairy industry has been working closely with state and federal government leaders to prepare for a coordinated response in the event of a national food safety recall, food bioterrorism, or a U.S. outbreak of foot-and-mouth (FMD) disease. [Click to read more](#)

- **CORRAL Update:** Some of you have expressed an interest in being part of the Colorado Department of Agriculture’s CORRAL (Colorado Rapid Response for Ag & Livestock) System. In the case of a significant livestock emergency incident, the State Veterinarian’s Office and the Colorado livestock industry will need your help to efficiently and effectively respond to a significant livestock incident. To increase our ready reserve of qualified livestock incident responders, we are asking those of you who are not part of our CORRAL System roster to consider joining. If you have interest, please email nick.striegel@ag.state.co.us. [Click to read more](#)
Secure Milk Supply (SMS) Project: The Secure Milk Supply project and plan is intended to identify and address issues to better prepare states, government, and industry to keep dairy farmers and the dairy industry in business in the event of a foot-and-mouth disease (FMD) outbreak in the United States. For more information on the project or if you are interested in participating in the SMS project, please contact Dr. Nick Striegel at nick.striegel@ag.state.co.us, or call 303-239-4162. Click to read more

Electronic Issuance of Permits...More States to Follow: We recently received word from Dr. Bruce King, State Veterinarian of Utah that accredited veterinarians can now go on-line for an entry permit for animals being imported into the State of Utah. A web-based permit module is also being developed for the State Veterinarian’s Office in Colorado to allow us to issue permits on-line which will provide better service, make us more efficient, and give us real-time information on livestock imports. Click to read more

Pet Animal Care Facilities ACT (PACFA) Update: Canine brucellosis infection is reportable to the state veterinarian and public health officials in Colorado. This infectious disease of dogs with zoonotic potential for humans should be on the differential list anytime dogs are presented for reproductive performance issues such as sterility or abortion or when dogs are presented with back, hip, or hind limb pain with no apparent cause. Testing can be requested from Rocky Mountain Regional Animal Health laboratory at reasonable cost, and any suspect or positive dogs should have blood culture to confirm the presence of the bacteria. Click to read more

Veterinary Medical Loan Repayment Program: Seven of the eight submitted Colorado Veterinary Medicine Loan Repayment Program (VMLRP) shortage areas were accepted. Although we had seven shortage areas approved, we only have one applicant to whom a VMLRP award was offered. Click to read more

Electronic Methods of Capturing Animal ID...“times are a-changing”!: For you veterinarians who dread having to hand-write all those cattle ID numbers onto test charts, here is a way to be more efficient, accurate, and save time. There is new technology called MIMs (Mobile Information Management System); it is worth checking out and is free! The MIM system is a program produced by USDA for use by private and regulatory veterinarians in the field to assist with the capture of large herd animal ID data as it relates to animal disease programs. Call 303-239-4161 and we can connect with you with one of our field veterinarians to help you get started. Click to read more

Cattle Imported from Mexico to Colorado: We would like to remind all accredited veterinarians who work with cattle imported into Colorado from Mexico that bovine tuberculosis is still a major concern. Only feeder animals (steers or spayed heifers of non-dairy breeds) or rodeo stock are allowed to be imported from Mexico. Breeding animals of any type are not allowed. Feeders must go to an approved feedlot and may not go to pasture. Rodeo stock must be tested negative for Tuberculosis twice before entering Colorado’s rodeo circuit, the first at importation and the second 60-120 days after importation. Click to read more

New Proposed Federal Animal Disease Traceability Rule: The proposed animal disease traceability rule would require cattle that are moved interstate to be officially identified. In
addition, the proposed rule will require veterinarians to individually list official identification numbers of cattle > 18 months of age on Certificates of Veterinary Inspection (CVIs). Numerous interactive discussions have taken place between CDA and various agricultural stakeholders over the last two months on the new proposed federal animal disease traceability rule. Comments on the proposed rule can be submitted either individually or through the organizations that individuals represent. If you have questions on the new proposed rule or need to know how to submit comments to USDA-APHIS, feel free to call our office at 303-239-4161.

**Got ID?** Maybe that’s a question we need to ask of ourselves who are involved in animal agriculture. The health and well-being of the livestock industry would greatly benefit by the presence of an effective animal disease traceability system. Three key players in making an animal ID system more effective are livestock producers, practicing veterinarians, and state animal health officials. All three play an essential role in different and various ways.

**Bovine TB:** As a result of the 2010 Tuberculosis outbreak, Colorado Department of Agriculture (CDA) submitted an application and was approved for USDA APHIS Cooperative Agreement funds to further the state’s mission of protecting Colorado livestock from bovine tuberculosis. Through these funds we are increasing the TB surveillance and monitoring of the high risk groups of cattle in Colorado, monitoring and educating the rodeo stock contractors on the risk of TB and the state disease control regulations, provide training for accredited veterinarians in the proper procedure for caudal fold testing, and doing educational outreach on TB.

**Livestock Emergency Management Stakeholder Meeting: Movement Control and Business Continuity in the Event of Foot-and-Mouth Disease:** On November 3rd and 4th, Colorado Department of Agriculture participated in the third meeting in a series of meetings on emergency response held in Riverdale, MD at USDA-APHIS; the meeting focused on preparing for and responding to an outbreak of foot-and-mouth disease (FMD) to protect animal health, animal agriculture, and food security. These stakeholder discussions clearly demonstrate the need for further FMD preparedness and response planning. To develop further plans for managed movement of livestock with the goal of business continuity for the livestock industry, we will need further producer and industry participation, State-Tribal-Federal planning, and consistent communication across all groups of stakeholders.

**State Veterinarian’s Office Staff Contact Information:**

New Staff added to the State Veterinarian’s Office!

Animal Industry Division of Colorado Department of Agriculture has new staff members who will be interacting with you in various ways.
Trish Menchaca has been hired to fill the front desk administrative support position. Trish brings a good sense of humor, a strong work ethic, and a yearning to learn. We are fortunate to have her with us; her previous position was with the Department of Labor and Employment.

The Division has also hired Jamee Amundson to fill the field animal health technician position. Jamee has had extensive livestock education, completed a B.S. in Animal Science at Iowa State University, and a Masters in Animal Science from the University of Nebraska. In addition, her experience in agriculture is very strong, including employment at the Nebraska Department of Agriculture doing field work.

We also have been able to hire Katherine Reid as a six month temporary field technician to conduct Scrapie disease activities such as surveillance, disease monitoring, regulatory compliance, and Scrapie disease education and outreach. Katherine has a strong livestock background through her Masters degree work and other animal agriculture experience.

Dr. Sara Ahola from Fort Collins is also new with us as of August, 2011. She is working part-time performing TB control, surveillance, and education for the Animal Industry Division. Her activities include:

1. Increasing the TB surveillance and monitoring of the high risk groups of cattle in Colorado
2. Monitoring and educating the rodeo stock contractors on the risk of TB and the state disease control regulations
3. Provide education and training in the proper procedure for caudal fold testing
4. Education and outreach to the dairy industry, dairy farmers, livestock associations, and veterinarians on the importance of TB surveillance, prevention, and response to disease outbreaks

**e-VET**

Animal Industry Division staff attended the Colorado Veterinary Medical Association’s convention on September 16th in Keystone, CO to give a State Veterinarian’s Update and to present new electronic methods for issuing inter-state health certificates in the movement of livestock across state borders. The presentation on electronic health certificates or certificates of veterinary inspection (CVIs) entitled, “e-VET” identified two significant issues that face the livestock industry:

1. Livestock traceability
2. Effective response to significant livestock emergencies

There is great benefit in using electronic health certificates for inter-state livestock movements; some of them are:

1. Real-time data on movement and animal ID
2. Reduces paperwork
3. Decreases costs
4. Increases time efficiency
5. Secure storage
There are currently two systems that provide electronic health certificate capability. The State Veterinarian’s Office staff highlighted the two services at the 2011 CVMA Convention and two Colorado practitioners gave live demonstrations on how to perform an electronic certificate of veterinary inspection (health certificate).

Dr. Paul Chard demonstrated the use of USDA’s Veterinary Services Process Streamlining (VSPS) which is available for use at no-fee to veterinarians. Dr. Marc McCall presented the use of Global Vet Link (GVL) which is a private company and charges a small fee for creating the electronic health certificates.

One of the goals of the State Veterinarian’s Office is to do ongoing outreach and education on the use and functionality of electronic CVIs. We also hope to enable our state field veterinarians and the federal field veterinarians to assist Colorado practitioners in making a transition to issuing more CVIs through an electronic mode.

**Annual Foreign Animal Disease (FAD) Training Course at CSU**

Forty veterinarians gathered for a week’s worth of training in the seventh annual FAD Course at the CSU Diagnostic Lab in Fort Collins. This course is coordinated by Dr. Tony Knight and funded through the Colorado Department of Agriculture (CDA) under the USDA APHIS FAD Cooperative Agreement. It was well received by all that were in attendance; the course was taught by world class speakers in animal health, veterinary emergency preparedness & response, veterinary diagnostics & pathology, and livestock economics. Drs. Roehr and Striegel presented information on livestock emergency response efforts within Colorado. In addition, new national strategies for a response to a foot-and-mouth disease (FMD) outbreak in the U.S. were discussed. Part of the course included interactive panel discussions and wet-labs for more in-depth learning. If you have not ever attended one of these courses, call Nick Striegel at 303-239-4161 or email him at nick.striegel@ag.state.co.us to get on the list for next summer’s course.

**Dairy Industry Crisis Drill...**

Dairy Management Inc. (DMI) held a national dairy crisis drill in Denver on August 17th and 18th. For nearly 10 years, the dairy industry has been working closely with state and federal government leaders to prepare for a coordinated response in the event of a national food safety recall, food bioterrorism, or a U.S. outbreak of foot-and-mouth (FMD) disease. This year the focus of DMI’s annual dairy crisis drill was a fictitious outbreak of FMD in the U.S. The staff of the Colorado State Veterinarian’s Office had the opportunity to participate as well as over 100 livestock industry-affiliated personnel from federal and state agencies, universities, Extension, producers, and livestock associations. They came together to cooperate, collaborate, and communicate in the mock dairy crisis drill. If an outbreak of FMD were to
ever appear in the U.S., it would significantly impact dairy producers, milk processing and manufacturing, consumers, veterinarians, the Colorado livestock industry, and the U.S. economy.

The dairy crisis exercise was a great opportunity to test parts of CDA’s Dairy Emergency Disease Response Plan, integrate CDA’s response plan with the dairy industry emergency plans, as well with USDA-APHIS’s FMD response plan. It provided a hands-on way and to work closely with the participants to strategize for efficient and effective ways to communicate to the public and consumers during a FMD outbreak. There was ample opportunity to network with the dairy industry, federal and state animal health officials, and others involved in livestock emergency management.

**CORRAL Update**

Many of you have expressed an interest in being part of the Colorado Department of Agriculture’s CORRAL (Colorado Rapid Response for Ag & Livestock) System. In the case of a significant livestock emergency incident, the State Veterinarian’s Office and the Colorado livestock industry would need your help to efficiently and effectively respond to a significant livestock incident. As all of you know, a foreign animal disease would have on a huge negative impact on the U.S. economy and animal agriculture. To increase our ready reserve of qualified livestock incident responders, we are asking those of you who are not part of our CORRAL System roster to consider becoming part of our CORRAL roster. If you have interest, please send the following to nick.striegel@ag.state.co.us:

1. Name
2. Home address
3. Cell phone number
4. Work address
5. Work phone number
6. Preferred email address
7. Occupation

The purpose of the Colorado Rapid Response for Agriculture and Livestock (CORRAL) System is to respond rapidly and effectively to emergency livestock incidents and disease outbreaks. There are six essential components of the CORRAL System with associated objectives:

1. Communication: Enhance our emergency response communication capabilities
2. Operations Center: Strengthen our State Veterinarian’s Office capability to respond
3. Resources: Building a roster of CORRAL responders and physical resources for an effective livestock emergency response
4. Relationships: Strengthen relationships with other state and governmental agencies, livestock associations, emergency management personnel /organizations
5. Agreements: Mutual agreements between agencies, organizations, and other states
6. Livestock Emergency Plans: Integrate CDA’s livestock specific plans with Colorado’s livestock industry & test them through exercises and training events

Communication with our CORRAL responders is one of the most important aspects of the system. As part of the CORRAL responder group, you will receive communication through a web-based system that
dispatches alerts, warnings, and notifications (DAWN). We will use this dispatch system to send email, voicemail, and text messages for rapid and efficient communication.

**DAWN**
- Dispatch for
- Alerts – a high level “alarm” and possible call to action
- Warnings – a moderate level “alarm”
- Notifications – information dispersed, a low level “alarm”

When you receive an email from the dispatch system, the sender’s address will be CDA@dccnotify.com, you may need to add this address to your “safe contacts.” If a voice message is sent to your phone, it will arrive with an area code of “615.” If you see a call from the 615 area code, try to answer the phone directly as you will then hear an interactive message and be able to immediately respond to any question asked. You may be asked: “Would you be able to respond to an emergency in a specified area in the next 48 hours?” You would then push one of the keys on the phone for a response. It will give us an immediate report on your availability. When needed text message alerts will dispatched to your cell phone.

Currently, we have about 160 CORRAL members. Most of them are veterinarians but there are three other credentialing categories.
- Veterinarians
- Animal Health Technicians
- Livestock Specialists
- Veterinary Support Staff

Credentialing is based on education, work experience, veterinary-affiliated work, farm\ranch livestock husbandry background, previous livestock practice experience, foreign animal disease training and other emergency management courses.

Training in addition to your experience and expertise takes many forms:
- In the case of a livestock emergency incident, we will be using some degree of “Just in Time” (JIT) training
- There are online training courses through FEMA (ICS –100 & ICS-700 and others)
- If you are interested in becoming part of the USDA/APHIS program of National Animal Health Emergency Reserve Corps (NAHERC), there is online training available. In addition, if you are a veterinarian or animal health technician and would be deployed through NAHERC, you would be paid as a temporary federal employee.
- Foreign animal disease (FAD) / Livestock-related training opportunities are available and you will be notified of those offerings

Future Exercises are planned to train and exercise our preparedness and response capabilities, we will also keep you informed of those opportunities. Volunteer liability protection is provided through Colorado legislation that gives you protection from any potential liability issues when you are part of an emergency response by the Colorado Department of Agriculture’s CORRAL System. In an incident in
which you were activated, you would need to carry your own health insurance even when participating in a state livestock emergency response.

We appreciate those of you who are part of CORRAL or have interest in joining as your willingness to serve the State of Colorado and the livestock industry is greatly appreciated.

**Secure Milk Supply Project ......**

Food and agriculture is a critical infrastructure of Colorado and of our nation. In particular, animal agriculture plays a key role in feeding our country and others in the world. A significant disease outbreak such as foot-and-mouth disease (FMD) could severely affect animal agriculture, have major economic effects on the U.S. economy, negatively impact animal health, and cause the public to stop eating certain meats and animal products even though FMD does not affect people or the safety of meat and milk products.

There are certain factors that increase the vulnerability of the U.S. livestock population to FMD. They include the presence of dense populations of animals and the frequent movement of livestock for marketing, feeding, exhibiting, and processing. In addition, people who travel globally have the potential to carry foreign animal disease agents from other countries to our immunologically naïve domestic populations of animals which certainly increases the risk of a U.S. catastrophic disease outbreak. Furthermore, agro-terrorism is an ever present concern for U.S. livestock and their health.

All of these factors point to the importance of being prepared to effectively respond to a FMD outbreak; yet we must not eradicate our farms and ranches in the process of controlling the disease. Important components of our mission at the State Veterinarian’s Office is protecting the health and well-being of our animals which will help keep our livestock producers in business, guard our economy and secure our food supply.

In order to achieve those goals, the Colorado Department of Agriculture (CDA) and Western Dairy Association (WDA) collaborated with the leaders of the Secure Milk Supply (SMS) Project in conducting a Secure Milk Supply (SMS) Workshop in Greeley, Colorado on October 26th, 2011. In addition to the discussion of the SMS project, there was discussion on the livestock emergency preparedness and response planning of the Colorado Department of Agriculture and Colorado’s dairy industry. Information was also presented on CDA’s Colorado’s Rapid Response for Ag & Livestock (CORRAL) System.
Participants at the workshop included and represented dairy farmers, practicing veterinarians, milk haulers, milk processors, CSU Animal Science, CSU Extension, CSU Diagnostic Laboratory, Colorado Division of Emergency Management, USDA-APHIS, state public health, state and federal veterinarians, Incident Command personnel, and CORRAL (Colorado Rapid Response for Ag and Livestock) System responders.

The Secure Milk Supply (SMS) project and plan is intended to identify and address issues to better prepare states, government, and industry to keep dairy farmers and the dairy industry in business in the event of a foot-and-mouth disease (FMD) outbreak in the United States. It is a joint project of USDA-APHIS, Iowa State University, University of California-Davis, and the University of Minnesota along with representatives from industry, state & federal government, and academia who serve on the various workgroups of the project. The workgroups are addressing the challenges of responding to a FMD outbreak while at the same time maintaining the long term viability of the dairy industry. It is an issue that is extremely important to federal/state animal health officials, dairy producers, processors, allied industries, policy makers, emergency management, consumers, and the nation’s economy.

In the event foot-and-mouth disease (FMD) is diagnosed in the United States, an animal health emergency will be declared and livestock and allied industries will feel the immediate impacts of animal quarantines, increased testing, and product movement restrictions. Foot-and-mouth disease (FMD) is a highly contagious viral disease of cattle and other cloven-hooved animals such as pigs, sheep, and goats. FMD does not affect humans. Movement restrictions are designed to contain the disease and minimize virus spread. Export markets for all cloven-hooved animals and animal products will likely be closed until FMD is eliminated.

Most dairy operations and processing plants do not have the capacity to store milk for more than 48 hours; some have less than 24 hours storage capacity. Thus a FMD outbreak in the U.S. could result in significant interruptions of milk and milk products to consumers, as well as create significant milk disposal and animal welfare issues on dairies. There are many challenges in controlling and eliminating FMD and at the same time helping to maintain the viability of the dairy industry and a secure supply of milk to consumers. Therefore, the SMS Project is an important step in addressing this complex and multifaceted problem.

The main purpose of the SMS project is to determine the most appropriate way to allow or permit the movement of milk out of an area that has been diagnosed with FMD. It focuses on

- Developing bio-security performance standards for dairy farms, milk haulers, and milk processors
- Setting up a disease surveillance plan and system
- Building decision making tools for the Incident Command that is charge of the emergency response efforts concerning the permitting of the movement of milk from non-affected farms out of the quarantined area

These livestock emergency response planning efforts will help avoid interruptions in milk movement from dairy farms (that have no evidence of infection) in a FMD Control Area to commercial processing, provide a continuous supply of wholesome milk and milk products to consumers, and maintain business continuity for the dairy industry.
For more information on the project or if you are interested in participating in the SMS project, please contact Dr. Nick Striegel, Colorado Assistant State Veterinarian at nick.striegel@ag.state.co.us, or call 303-239-4162.

Electronic Issuance of Permits...More States to Follow

We recently received word from Dr. Bruce King, State Veterinarian of Utah that accredited veterinarians can now go on-line for an entry permit for animals being imported into the State of Utah. The Utah Department of Agriculture sent the following steps to use the web-based permitting system:

2. Click on "Online Services"
3. Under online Services click on "Animal Entry Permits"

The first time you use the system you will have to register but after the registration, the process should be very seamless and quick. This is a 24 hour service, 7 days a week.

If you have questions, call the State Veterinarian’s Office at the Utah Department of Agriculture and Food at (801)538-7162.

There are a number of states that will be soon following the lead of Utah in implementing a web-based permitting system. The State Veterinarian’s Office in Colorado is in the process of implementing a new animal health information management system called USAHerds. It will allow us to be more efficient in managing our data and integrating our animal health and disease control programs. A web-based permit module is being developed through USAHerds to allow us to issue permits on-line which will provide better service, make us more efficient, and give us real-time information on livestock imports. There are at least three other states beside Colorado that are also planning on providing web-based access for obtaining permits. “Times are a-changing.”

Pet Animal Care Facilities Act (PACFA) Program

Kate Anderson, DVM; Director of PACFA

Canine Brucellosis: Management and Control

Brucella canis is a bacterial infection found in dogs. Transmission among dogs occurs through exposure to placental material, vaginal discharges, milk, urine and semen from infected dogs, as well as saliva, and nasal and ocular secretions. Breeding or venereal transfer is also a common mode of transmission. The
bacteria survive well in high humidity, low sunlight environments and can remain infective on fomites or objects within a kennel. Female dogs may shed the bacteria in their urine and the organism is present in seminal and prostatic fluid from infected males. There is a risk of infection to humans from exposure to tissue and fluids infected with the *Brucella canis* bacterium.

The clinical signs of infection in dogs range from an asymptomatic apparently healthy dog, to a dog that has mild lethargy or lack of libido or serious reproductive issues. Females commonly present with abortion at 45-59 days of gestation. Other signs in females include early embryonic death or what appears to be infertility or failure to become pregnant as well as the whelping of premature or weak pups that fail to survive to weaning. In males signs of infection are infertility, epididymitis or inflammation of the testicles, prostatitis and abnormal sperm production.

A diagnosis of suspected *B. canis* infection is often made when an apparently healthy female aborts during the last trimester of gestation. A similar suspicion would occur with a male that appeared to be infertile or was producing abnormal sperm. Further diagnostic testing to confirm *B. canis* infection includes serological testing and blood culture. Antibody titers in the blood will decrease the longer the animal has been infected and if the bacteria are hiding within the cells of the body. The only definitive test is a positive culture of the bacteria from blood or tissue samples. Negative culture results do not rule out infection because bacteremia is intermittent. Positive test results must be reported to the State Veterinarian’s office for follow up.

Typical ways to protect a breeding kennel from infection with the bacteria include quarantining new additions to the kennel and testing them twice at least 30 days apart. Only if they have two negative tests should they be introduced into the kennel population. Testing all breeding dogs yearly will identify those dogs that may have been hiding their infection during the previous test interval. Dogs within the kennel that test positive should be retested using additional serological tests as well as culture. If they remain positive they should be euthanized.

Managing an outbreak of *B. canis* in a kennel can be difficult. First all dogs must be quarantined by housing them individually. The State Veterinarian will issue an official quarantine of an infected kennel after a positive culture confirmation. The quarantine will be released when all dogs over 12 weeks of age tested using one of the serological tests every 30 days have two negative tests. Dogs that test positive should be euthanized. The premises should be thoroughly cleaned and disinfected using detergent and sanitizing solutions. Kennel personnel should use proper biosecurity to limit the spread of bacteria around the kennel and should use personal protective equipment when handling dogs and cleaning the facility.

Treatment for *B. canis* positive dogs residing in breeding kennels is not recommended as no method has been shown to completely remove all bacteria from the animal. Antibiotics in conjunction with spay or neuter have been used to temporarily halt bacterial growth and shedding of organisms from an infected animal, but because the bacteria can hide within cells in the body in very small numbers, there is no guarantee of a cure and no way to determine when the animal might begin shedding bacteria again. There always remains a risk of transmission to people and dogs.

*B. canis* is a zoonotic disease which can also be seen in pet dogs. This disease should be considered when presented with young spayed or neutered dogs that exhibit back pain. Discospondylitis is a
common sign of infection in dogs as young as 6 months that may have become infected while residing in a breeding kennel or whelped by an infected mother. Transmission of bacteria can occur through infected urine, saliva and tears from these altered dogs. The zoonotic potential is relatively small but humans can become infected when handling fluids or tissues from infected dogs or being exposed to aerosolized bacteria during power washing of kennels. Immunocompromised individuals, children and the elderly are most at risk for infection. The most common clinical signs of infection in humans are fever, fatigue, headache, chills and weight loss or what is commonly termed “flu-like symptoms”.

For more information contact the State Veterinarian’s office at 303-239-4161 or visit our web site at www.colorado.gov/ag/animals

**Veterinary Medical Loan Repayment Program (VMLRP)**

The Veterinary Medicine Loan Repayment Program is a federal program under USDA to determine the geographical areas that have a shortage of veterinarians and to administer a protocol to accept veterinarians into the loan repayment program through a qualifying application process. USDA’s Veterinary Medicine Loan Repayment Program (VMLRP) helps qualified veterinarians offset a significant portion of the debt incurred in pursuit of their veterinary medicine degrees in return for their service in certain high-priority veterinary shortage situations.

Seven of the eight submitted Colorado Veterinary Medicine Loan Repayment Program (VMLRP) shortage areas were accepted. Although we had seven shortage areas approved, we only have one applicant to whom a VMLRP award was offered. The VMLRP 2011 shortage situation maps have now been updated to include coding of shortages for which offers have been made. The 2011VMLRP shortage maps can be accessed at: http://www.nifa.usda.gov/nea/animals/in_focus/vmlrp_11/vmlrp_shortage_situation_usmap.html

The seven shortage areas are identified on the map, see the above link for more details.

A planning session is being organized to evaluate this year’s outcome and discuss next year’s strategy for the VMLRP.
Electronic Methods of Capturing Animal ID...”times are a-changing”!

For you veterinarians who dread having to hand-write all those cattle ID numbers onto test charts, here is a way to be more efficient, accurate, and save time. There is new technology called MIMs (Mobile Information Management System); it is worth checking out and is free! It will

- Save time and labor with quicker animal data recording on your paperwork
- Prevent mistakes in transposition of official animal ID numbers to required reports & records
- Keep all your veterinary herd work data in a safe place that is searchable and easily managed

The MIM system is a program produced by USDA for use by private and regulatory veterinarians in the field to assist with the capture of large herd animal ID data as it relates to animal disease programs. This FREE program is designed to assist veterinarians in creating a database of animals that are being tested or are part of a regulatory disease program such as Tuberculosis and Brucellosis. The program works to capture Radio Frequency Identification (RFID) information for individual animals and record animal disease status. The program then works with USDA official forms, such as the VS-622 TB Test form, to pre-fill the form electronically for submission. It can also create and read bar-code labels for sample submission, such as blood for Brucellosis testing.

The program works on both a laptop and/or a Personal Digital Assistant (PDA). Capture of individual animal’s RFID is not necessary if the herd owner can provide a spreadsheet of animal data. For example, MIM is compatible with DairyComp. Dairy herdsmen can provide the veterinarian with the DairyComp herd data which is easily transferred into MIM for creation of animal disease records and official forms. All data can be stored on either your laptop and/or PDA for future reference. If you want to learn more about how MIM could help your practice and assist you in efficiently filling out TB Test charts or Official Calf-hood Vaccinate (OCV) forms, contact our office for more information and to schedule a training session on MIM at your clinic. Call 303-239-4161 and we can connect with you with one of our field veterinarians to help you get started.

Livestock import requirements for cattle from Mexico

We would like to remind all accredited veterinarians who work with cattle imported into Colorado from Mexico that bovine tuberculosis is still a major concern. Only feeder animals (steers or spayed heifers of non-dairy breeds) or rodeo stock are allowed to be imported from Mexico. Breeding animals of any type are not allowed. Feeders must go to an approved feedlot and may not go to pasture. Rodeo stock must be tested negative for Tuberculosis twice before entering Colorado’s rodeo circuit, the first at importation and the second 60-120 days after importation. Rodeo stock must be tested once annually thereafter.

If you have any questions about animal movement, consult our Animal Movement Requirements page at: www.colorado.gov/ag/animalimport or call our main office number, 303-239-4162.
New Proposed Federal Animal Disease Traceability Rule

The goal of animal disease traceability is to enable the livestock industry, state and federal animal health officials to respond rapidly and effectively to animal health event. Important components to the proposed rule are the following:

- Applies only to livestock moved interstate
- Additional costs to the livestock industry will be minimized.
- Animal disease traceability should have the goal of operating at the speed of commerce
- Administered by the states with confidentiality of premises and animal ID data

The proposed animal disease traceability rule would require cattle that are moved interstate to be officially identified. In addition, the proposed rule will require veterinarians to individually list official identification numbers of cattle > 18 months of age on Certificates of Veterinary Inspection (CVIs).

Numerous interactive discussions have taken place between CDA and various agricultural stakeholders over the last two months to discuss the new proposed animal disease traceability rule. The State Veterinarian’s Office has met with representatives and members of the following groups; Colorado Cattlemen’s Association, Colorado Livestock Association, the Colorado ID Animal ID Working Group, Farm Bureau members, CSU Extension, and the Colorado Veterinary Medical Association. The goal of these meetings has been to increase awareness, discuss specific requirements, and provide an interactive forum to explore implications for veterinarians, producers, auction markets, and other agriculture-affiliated businesses. In addition, a further objective was to help enable participants to think about any comments that should be sent to USDA-APHIS on the new proposed animal disease traceability rule. Comments can be submitted either individually or through the organizations that individuals represent. If you have questions on the new proposed rule or need to know how to submit comments to USDA-APHIS, feel free to call our office at 303-239-4161.

Got ID?

Got ID? Maybe that’s a question we need to ask of ourselves who are involved in animal agriculture. The health and well-being of the livestock industry would greatly benefit by the presence of an effective animal disease traceability system. Advantages include:

- Aids in disease trace-back by animal health officials
- Vital to the management of animal health programs
- Essential in preventing livestock disease in the event of a significant livestock emergency incident

Three key players in making an animal ID system more effective are livestock producers, practicing veterinarians, and state animal health officials. All three play an essential role in different and various ways to enhance the implementation and management of ID systems in order to provide better animal health and disease control programs which ultimately benefit the livestock and the producers.
The recent TB outbreak in Colorado that started in March 2010 that resulted in an outbreak response and epidemiological investigation highlighted areas within the animal health arena which need improvement. The major “lessons learned” on how we can improve animal disease prevention and control are distilled down to three important factors:

- We need to individually identify a greater percentage of livestock with official IDs
- We need to simplify the recording of official animal IDs on health certificates (certificate of veterinary inspection /CVI) through electronic means
- We need enhanced capability to capture data from health certificates which will allow electronic searching for animal IDs

There is a new proposed federal animal disease traceability rule that has been published for public comment. It has implications for the entire livestock industry but the essence of the new rule is that all cattle over 18 months of age moving interstate will need to have an official ID ear tag and have that official ID tag number recorded on the health certificate (certificate of veterinary inspection/CVI) prior to movement. The most common official ID ear tags are USDA “brite” tags, Brucellosis vaccinate ear tag (orange Bang’s Tag), 840 RFID tags, or 840 Visual tags.

What does the new rule mean for producers, veterinarians, and state animal health officials? How can the new rule be integrated most efficiently into production systems and practices?

For producers, decisions will have to be made about the type of official ID tag to be used in their production systems. The “brite” tags are metal clip-type tags that are inexpensive but don’t give the ability to quickly electronically read and record. Animal ID systems in the dairy industry have been used extensively and integrated with production management systems. For dairies, an important component is to “marry” the official ID tag number with the electronic ID system that is being used. It will allow for increased efficiency in routine testing and interstate movements. For the beef industry, decisions about the type of tag to use is also important and consideration should be given to the 840 electronic tag especially if they will be shipping cattle (over 18 months of age) across state lines in the future. In addition, greater efficiency will be accomplished by incorporating the official ID ear tags into beef cattle production records.

For practicing veterinarians, the ability to electronically capture and manage animal ID data will create efficiency; reduce transcription errors, and aid producers in moving cattle into interstate commerce. It will be advantageous for veterinarians to use electronic methods to write health certificates as it advances their management of health certificates (certificate of veterinary inspection/CVI) and gives
them a way to transfer electronic animal ID data directly to the health certificate/CVI, and quickly transmit the information. Currently, there are two systems that provide services that enable veterinarians to fill out health certificates electronically. One is GlobalVetlink (GVL) and the other is USDA-APHIS system called Veterinary Services Process Streamlining (VSPS). They both are capable of producing electronic health documents, upload electronic animal IDs, integrate laboratory tests, and submit documents to state officials on a secure web system. GVL is a private company and is fee-based; VSPS was developed by the USDA and is free. Here are the websites for the two systems:

In addition, there is also a software system from USDA called Mobile Information Management System (MIMS) that is available to accredited veterinarians which allows for electronic animal IDs to be uploaded into the appropriate TB test charts to simplify and reduce errors in filling out the necessary verification paperwork.

For state animal health officials, we need to increase our capabilities to electronically capture data that is contained on the health certificate / interstate certificate of veterinary inspection. In addition, once health certificate information is in electronic format, it will give a greater and more efficient searching capability. Not only will those abilities be important in disease trace-back activities but it will also strengthen the State Veterinarian’s Office efforts to protect livestock herds in the event of a significant livestock disease outbreak. We are currently starting to implement a health certificate scanning system along with building a better database management system. We are also in the planning stages of making available to veterinarians an orange 840 RFID bangs vaccinate tag for veterinarians to use instead of the orange bangs vaccinate metal clip ear tag that is presently used. This would give electronic animal ID capability to those beef and dairy animals that are bangs vaccinates (official calfhood vaccinates/OCV).

For every sector of livestock production and veterinary practice, adaptation and modification of management practices is essential to stay up with changes in the industry, create efficiencies, and be profitable. All of us will enhance our effectiveness in animal health and production by how effective we are in managing the different aspects of our animal ID systems. Got ID?

**Bovine Tuberculosis**

As a result of the 2010 Tuberculosis outbreak, the Division of Animal Industry of the Colorado Department of Agriculture (CDA) submitted an application and was approved for USDA APHIS Cooperative Agreement funds to further the state’s mission of protecting Colorado livestock from bovine tuberculosis. The Cooperative Agreement funds are being use to employ Dr. Sara Ahola to assist in:

1. Increasing the TB surveillance and monitoring of the high risk groups of cattle in Colorado
2. Monitoring and educating the rodeo stock contractors on the risk of TB and the state disease control regulations
3. Provide training for accredited veterinarians in the proper procedure for caudal fold testing
4. Education and outreach to the dairy industry, dairy farmers, livestock associations, and veterinarians on the importance of TB surveillance, prevention, and response to disease outbreaks
CDA has been working with stock contractors in the state to increase compliance with TB testing of rodeo animals, especially Mexico-origin roping steers. An important component of better surveillance for TB is promoting the use of Radio Frequency Identification (RFID) ear tags for greater animal traceability in the event of a disease outbreak and the subsequent disease trace-back.

CDA has worked with PRCA to develop a TB animal health flyer that will be distributed to all PRCA stock contractors and other interested parties within PRCA. The educational flyer discusses the animal health regulations for rodeo stock, specifically, as it relates to Colorado’s TB regulations.

PRCA expects to promote this flyer on their website, at their Board of Directors’ meeting at the National Finals Rodeo in December, and with all stock contractors within the PRCA. Feel free to contact our office if you would like a copy sent to you electronically or if you would like some of the printed documents for use in your practice or in animal health promotion efforts.

Another component of our TB prevention efforts is to enhance our TB testing and surveillance methods through the Caudal Fold Test (CFT). While many of you do hundreds, if not thousands of CFTs a year, there are a number of veterinarians that only occasionally do CFTs. The state is tasked with the responsibility to make sure that all accredited veterinarians are properly administering a CFT and that all necessary paperwork is submitted in a timely fashion. If you are a newly accredited veterinarian or want a refresher on proper technique for completing Caudal Fold Tests for tuberculosis contact your area federal Veterinary Medical Officer (VMO), CDA field veterinarian, or our state office; we will be glad to help you. Be on the lookout for an educational brochure on Caudal Fold Testing being mailed to all Colorado accredited veterinarians in the near future.

Emergency Management Stakeholder Meeting on Movement Control and Business Continuity in the Event of Foot-and-Mouth Disease

This written summary provided by USDA-APHIS. Meeting held November 3rd and 4th, 2011 in Riverdale, MD; it was sponsored by APHIS, Veterinary Services and University of Minnesota, Center for Animal Health and Food Safety (CAHFS)

On November 3rd and 4th, Colorado Department of Agriculture participated in the third meeting in a series of meetings on emergency response, which were focused on preparing for and responding to an outbreak of foot-and-mouth disease (FMD) to protect animal health, animal agriculture, and food security. USDA-APHIS staff and the Center for Animal Health and Food Safety (CAHFS) – University of Minnesota jointly facilitated the meeting.
Industry representatives from across animal agriculture gathered alongside State and Federal officials to discuss how we can prepare for an FMD outbreak. Specifically, they discussed how livestock movement could be effectively managed to facilitate business continuity in an FMD outbreak. This brief summarizes the discussions and conclusions of this meeting.

The meeting began with a broad overview of FMD from APHIS, framing the many challenges of a successful response effort, based upon livestock demographics in the United States. Additional presentations from industry were given, as well as presentations from collaborating academic centers on ongoing successful continuity of business planning efforts. Subsequently, participants were prompted to identify opportunities and gaps in FMD planning through small-group discussions.

Many themes were consistently identified by the participants throughout the discussion segments. In terms of a successful FMD response effort, it was clear that a rapid, but highly coordinated response effort is necessary, based on science and risk-based approaches.

Stakeholders agree that a successful FMD response must be based upon good working relationships that are both established and maintained between the government, producers, and the food industry. Most importantly, stakeholders emphasized the importance of a balanced approach between disease containment with rapid eradication and risk-based controlled movement to facilitate business continuity.

A successful response effort would avoid, to the extent possible, unintended negative consequences. With risk-and science-based approaches, stakeholders are optimistic that long-term disruptions to interstate commerce and international trade may be avoided. Similarly, there would not be a significant loss of protein or producers driven from business due to economic hardships. In addition, inconsistent, inadequate, and incorrect perceptions could be mitigated or avoided by frequent, open, and consistent communications with each of the different stakeholder communities.

While it is clear that stakeholders have a vision of what a successful FMD response would look like, as well as specific consequences to avoid, the U.S. food system would face many particular challenges. The points below highlight the key choke points in a U.S. FMD response effort that stakeholders identified. These choke points are significant concerns, particularly in balancing the need to rapidly contain FMD while also facilitating the movement of uninfected animals and animal products in an FMD outbreak.

Identified Choke Points in an FMD Response

- Lack of preparedness planning.
- Funding and resource constraints, including personnel.
- Lack of diagnostic tools and laboratory capacity.
- Inability to effectively manage movement of animals and animal products during an outbreak.
- Lack of vaccine and associated resources.
- Implementing effective biosecurity constraints while maintaining the speed of commerce.
- Politics and bureaucracy of complex decision-making.
- Lack of real-time information systems and flows.
- Disposition of vaccinated and/or recovered animals in the marketplace.
In addition to these choke points, there were gaps identified in current emergency response capabilities. In terms of collaborative planning, stakeholders suggested that coordinated State-Federal-Tribal and multi-agency planning is currently insufficient. Additionally, participants generally felt that outreach to other stakeholders, in non-traditional commodities, was also lacking. Technically, a major gap in response capability is the limited availability of current FMD vaccines, along with lack of acquisition, distribution and delivery plans. Finally, funding for improved capabilities was considered a gap, whether for coordinated responder training, vaccines, diagnostics, or other tools.

Despite these many challenges identified by stakeholders, meeting participants identified key options and potential opportunities that could be leveraged to improve FMD preparedness and response planning. Overall, there was a consensus that additional planning is critical to manage movement through risk-based efforts while avoiding the unintended negative consequences. The box below summarizes additional options suggested by meeting participants.

Options for Improving FMD Preparedness and Response

- Additional education initiatives, both in advance and during an outbreak.
- Consistent communication messages to all affected (including the public).
- Additional capabilities to effectively manage movement of animals and animal products during an outbreak.
- Rapid diagnostic tests and associated surveillance strategies.
  - To determine extent of disease spread.
  - To facilitate and expedite animal and product movement from uninfected premises.

These stakeholder discussions clearly demonstrate the imperative for further FMD preparedness and response planning. Further producer and industry participation, State-Tribal-Federal planning, and consistent communication across all stakeholders will be needed to develop further plans for managed movement. Working together, stakeholders can help to protect animal agriculture, animal health, food security, and public health in an FMD outbreak by balancing the necessity of rapid FMD control and containment with the need for business continuity.
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