

**ADVANCING ANIMAL DISEASE TRACEABILITY
ROAD MAP FOR COLORADO
A Three-Year Plan**

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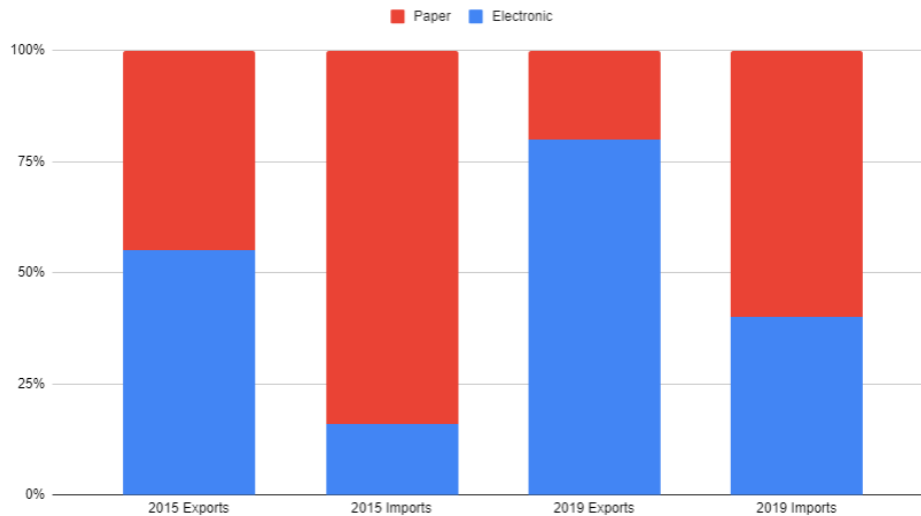
History, Vision Statement and Mission Statement

The Animal Health Division of the Colorado Department of Agriculture (CDA) has greatly enhanced its animal disease traceability capabilities in the last 10 years. Important components of the improvements were made possible through the Animal Disease Traceability Cooperative Agreements from USDA APHIS Veterinary Services. Animal Disease Traceability is not something new but has been a focus of the Division's office processes dating back to the implementation of the health certificate system for interstate movement of livestock. During this history, much of the Division's animal disease traceability was based on the paper health certificate system but lacked the ability to quickly query, search, analyze, and run reports on livestock premises, livestock movement, and animal ID. Instead, disease trace-outs and finding animals of interest in a disease outbreak were done through accessing paper based filing systems of the day. Many times, those systems were very inadequate and the time involved in searching for data is very time-consuming.

Up until 2012, a paper based filing system was still in use at CDA. In January 2012, the Division began the transition from a paper-based filing and searching system to an electronic, searchable, database for livestock premises, livestock movement data obtained from certificates of veterinary inspection (CVI), animal ID information, and management of animal incidents. CDA contracted with Computer Aid Incorporated (CAI), the former software vendor for the USAHERDS animal health information management system, and implemented it in July 2012. The USAHERDS system and CDA's development of detailed office processes and standard operating procedures (SOPs) for all USAHERDS processes and personnel are key components for success of the system.

This electronic transformation was not one that happened overnight, but the Division continues to set goals, objectives, and priorities for advancing its electronic animal disease traceability capabilities with the overarching goal of rapid response to real life animal health and disease control incidents. Consistent, accurate, and proficient data entry of premises, livestock movement, animal ID, and laboratory testing information is vital for accurate and useful reporting and analysis. USAHERDS has helped to increase the speed of response to real life disease incidents and outbreaks and improved the management of animal incidents such as all-hazard events like wildfire, blizzard, flood, and other natural disasters.

Foundational to our animal disease traceability goals is the Division's high priority to increase the number of veterinarians that use electronic CVIs; which allows data from the CVIs to be directly migrated into the USAHERDS database. We have made significant progress as currently there are 1,193 Colorado veterinarians that use some type of electronic CVI system. The use of electronic CVIs creates greater office efficiencies within the Animal Health Division because it saves the Division's staff from having to do as much data entry as there are fewer paper CVIs that arrive in the office. The chart below shows the percentage of import and export CVIs that were electronic versus paper in the fourth quarter of 2015 versus the fourth quarter of 2019. As you can see, today 80% of our CVIs issued by Colorado veterinarians are electronic.



Manual data entry from paper CVIs takes an immense amount of time to capture and transfer that livestock movement data and animal ID data from the paper certificates and enter it into USAHERDS. Through the office efficiencies created by increased electronic CVI data “flowing” automatically into the database, it has allowed staff the time to collect more animal ID data from the paper CVIs. Ultimately this has resulted in greater animal disease traceability through animal ear tag information becoming more searchable. For example, in the last quarter of 2019 Division staff entered 33,026 official IDs from cattle into USAHERDS, there were 65,121 cattle IDs that were migrated into USAHERDS through the use of electronic CVIS. To compare, in a recent quarter of 2016, the Division staff entered 30,649 official IDs from cattle CVIs into USAHERDS. In the same quarter of 2015, there were only 11,396 official IDs entered from cattle CVIs. In addition, Division staff continue to create ideas for enhancements within USAHERDS to improve the speed of uploading animal ID numbers and other improved capabilities so that enhancements can be built by Acclaim (the vendor for USAHERDS) within the database. Overall, our ability to search livestock movement data and animal ear tag information has improved considerably which aids our animal disease traceability and livestock emergency response efforts.

In 2015, CDA contracted with CAI (the former vendor for USAHERDS) to implement USALIMS at the Animal Health Division’s Animal Health Laboratory (AHL). It is a laboratory information management system that is a sister application to USAHERDS, it is being used at 19 different animal health laboratories across the country. The addition of USALIMS to our Division has further advanced animal disease traceability efficiencies. It enhances information sharing, facilitates transfer of samples between labs, streamlines reporting of program disease data, increases the number of official animal IDs recorded in USAHERDS, and enables our disease response activities to be more effective. Also, more importantly, it provides real time information on laboratory testing and ties those results to the premises in USAHERDS therefore increasing efficiency and reducing labor. The USALIMS at AHL also tracks official ID tags and paper CVIs that are dispersed to Colorado veterinarians, aiding in trace-back activities.

Colorado State University, a National Animal Health Laboratory Network lab, began using USALIMS several years ago. CDA recently funded an enhancement that will allow messaging from CSU’s USALIMS database directly into USAHERDS. This capability will drastically increase our

capability and efficiency to respond to disease incidents and outbreaks.

Overall, the vision of the Animal Health Division of CDA is to advance animal disease traceability and protect Colorado's livestock industry, and function cooperatively and proficiently with Colorado's two Native American tribes, 49 other States, and the USDA APHIS Veterinary Services in order to respond effectively to livestock disease and all-hazards events.

The mission of the CDA is to strengthen and advance Colorado's animal agriculture industry; ensure a safe, high quality, and sustainable food supply; and protect consumers, the environment, and natural resources. More specifically, the mission of the Animal Health Division of CDA is to be responsible for animal health and livestock disease control activities in Colorado and to provide for an efficient and effective response to significant livestock disease incidents

This Animal Disease Traceability Road Map lays out specific traceability strategic objectives for Colorado to serve as a guide and sets the 3 year course for animal disease traceability activities running through FY 2022.

Traceability Strategic Objectives for Colorado

1. Achieving and Reporting on National Priority Traces

The USDA/APHIS establishes National Priority Traces (NPTs) with which to assess the procedures that are in place to perform a real life animal trace for each state. These NPTs set up a framework of exercises to measure the amount of time it takes to locate information related to an animal of interest. Each state is categorized according to the size of the cattle industry in that particular state, and assigned a number of exercises in each of 4 different categories (see table below). Colorado is considered to have a large cattle industry and therefore is in one of the highest number categories of NPTs exercises to complete in each of the categories. Animal identification and livestock movement information is supplied to the state officials and the time to follow the animal trace to completion is recorded for each state.

Colorado Department of Agriculture (CDA) has used these NPTs as a basis for the Division's performance measures in the CDA Performance Plan and has served as an integral part of our overall Division's goals. Here is a template of our Division's Traceability performance measures that we record and report for each fiscal year:

Description		FY__	FY__
% of animal disease traceability performance exercises conducted that meet USDA traceability standards	Target	100%	100%
	Actual		
% of disease traceability investigations determining the ownership of the diseased animal(s) within 1 business day	Target	95%	95%
	Actual		
% of disease traceability investigations determining the movement of diseased animals within 7 business days	Target	95%	95%
	Actual		
Average time to determine in what state that an imported animal was officially identified	National Baseline		
	CDA		
Average time to determine the location in the State at which the animal was officially identified	National Baseline		
	CDA		
Average time to determine from what state was an animal shipped	National Baseline		
	CDA		
Average time to determine from what location within the exporting state that the animal was shipped from	National Baseline		
	CDA		

Description	FY__	FY__	FY__
	# of total livestock premises recorded and maintained in USA Herds		
# of livestock CVIs handled by the Animal Health division			
# of paper livestock CVIs where data is entered into USA Herds			
# of private veterinarians using electronic CVIs			
# of animal disease traceability performance exercises conducted to meet USDA traceability standards			

We strive to meet not only the required number of NPT exercises in each of 4 categories, but to exceed the number by including real life trace performance as well. All of the NPTs are currently recorded using the USDA/APHIS database of EMRS2 and Colorado maintains a certain number of staff that is proficient in the use of EMRS2 and will continue using EMRS2 to record all NPT data. In addition, we will also notify and inform all USDA Veterinary Services – District 3, personnel and CDA staff and field personnel on the results of the trace performance measure exercises in order to educate them on our current achievements and create awareness for future trace exercises. We also aim to keep all field VMOs, AHTs, and CDA field staff involved in ADT activities in the State as it takes buy-in at all levels to assist our accredited veterinarians, livestock markets, and livestock producers in reaching our goals for ADT. By informing the VMOs and AHTs what we are doing well and what we need to improve upon, we enhance all aspects of ADT and NPT reporting with the State.

It is part of the Division's plan to continue to educate and encourage Colorado veterinarians to use improved methods of logging and recording official animal ID tags that they have used in their producer's operations so that when we trace an official ID tag back to a veterinarian or clinic, they can quickly and efficiently inform us where those official ID tags were installed. We will continue to find useful options for veterinarians and promote their use whether it is hard copy records or electronic methods. This will improve our ability to trace back animals of interest and also improve our capability to complete all NPT exercises.

Another activity under this objective is to work towards the development and implementation of an electronic brucellosis vaccination form so that data that is entered by the veterinarian can be uploaded directly into the USAHERDS database. This will increase the number of official animal IDs in USAHERDS, provide better animal disease traceability, and improve our trace-back proficiency.

2. Provide Proficient and Effective Administration and Reporting of Official Identification Devices

Official identification devices can run the gamut of sizes and shapes, and the Colorado Department of Agriculture has control over the distribution of three types; metal Official Calfhood Vaccinate (or OCV) ear tags, metal National Uniform Ear tagging System (or NUES) ear tags, and RFID OCV and white button ear tags. These are to be distributed by the Animal Health Laboratory (AHL), a part of the Division of Laboratory Services at CDA. We are able to track the metal tags and the RFID buttons and their sales to the veterinarians and producers that order them through AHL and the USALIMS laboratory information management system.

Additionally, official identification devices are sold through various tag manufacturing companies to Colorado producers directly, and this information is reported to the Animal ID Number Manager (AINM) database through SCS and SCS- Scrapie. CDA currently has three staff members

that are trained and proficient in searching these and other databases for information on official animal ID and specific animals of interest. We have the goal of keeping at least three staff members with access and proficiency to search for official animal ID data located in the following nine databases: AINM, SCS, SCS-Scrapie, EMRS2, VSPS, IMI Global, GVL, USALIMS, and USAHERDS. These are all databases that could be searched to find an animal of interest during a real-world trace-out scenario. This level of proficiency in multiple databases gives us the most rapid response possible in both real-world traces and NPTs.

This level of administration and reporting on official animal identification has helped us to highly value our objectives in increasing the number of electronic animal IDs in our USAHERDS database. We have set as a high priority the intention “to enter all animal ID data from CVIs, laboratory accessions, and other paper forms that contain animal ID into the USALIMS and USAHERDS database.” CDA will continue that objective and also will work with Acclaim, the vendor for USALIMS and USAHERDS, to enhance traceability capabilities of the stated programs. CDA has taken the lead in designing and funding the creation of an electronic CVI (VET CVI) application that will allow the creation and sharing of CVIs for veterinarians.

By providing for the increased ease of uploading animal IDs, we are able to provide better animal disease traceability along with a marked increase in accuracy of the ID numbers due to fewer manual transcriptional errors. To this end, CDA strives to continue to educate veterinarians and producers on the value of electronic official animal ID to their business models, with the benefit of increasing animal disease traceability. The Division will offer up to 180,000 no-cost RFID tags, as allocated through USDA, to veterinarians who want to upgrade and use these tags for their clients’ replacement livestock. We will continue to encourage and promote these electronic ID tags in young breeding cattle as these cattle usually end up as part of the “breeding herd” and is an excellent way to provide for the “bookend” approach to livestock traceability. Also, we have worked with many of the veterinarians who are using electronic CVIs to help them in migrating official animal ID tag numbers right on to the CVI so that all of those tag numbers automatically import into USAHERDS with the certificate.

For those veterinarians who use paper CVIs, when an addendum comes with the CVI that lists a large number of animal IDs, we contact those veterinarians and ask them to send us the list of animal IDs in electronic format and promote our electronic version of the eCVI . Using the electronic format helps to increase the speed and number of IDs added to the USAHERDS database; it also helps maintain client and animal ID records in electronic format. Part of our work in this objective is to continue to look for ways to help veterinarians and producers keep electronic records of official animal ID even if they are not using electronic ID tags. If a producer or veterinarian receives the no-cost EID tags, they will be required to provide us with their animal ID records.

We will do some spot-checking on the veterinarians and producers who received the no-cost EIDs from AHL to see what type of log or index of animal ID tags they use. We will continue to make this a priority. This would also apply to livestock market veterinarians and the auction markets to show them how vital these animal ID tag records are to maintain good traceability. This type of baseline “audit” would allow us to better serve both veterinarians and livestock markets by

helping them to close gaps in their own recordkeeping. We will continue to make this a priority.

We also plan to continue looking for new efficiencies that could be developed between databases of different states and even between State and Federal databases in regards to sharing the animal ID information in a timely and uniform manner. Wherever possible, we would like to be able to upload or download data, and not have to enter it manually.

The Department's AHL prides itself on excellent customer service; one of the goals of the Lab is to always have an adequate supply of official ID tags on hand so that the backorders are reduced to a minimal number. This is also one of the performance measures for the Lab. In addition, when veterinarians call to order or inquire about official ID tags, someone always gives the caller some options of different tags that are available. It will continue to be an excellent way to inform and educate veterinarians on how they could "upgrade" their animal ID methods.

3. Integrate and Provide Efficient Processes for Information Sharing in order to Improve Traceability and Disease Control Capabilities

Since 2012, we have used USAHERDS as our animal health information management database. There is much overlap between livestock disease control, animal emergency response, and disease traceability; USAHERDS stores information on livestock premises, official animal ID, livestock movement as captured from certificates of veterinary inspection (both import and export CVIs), and disease outbreak incidents in Colorado. It is a highly searchable database that allows for timely responses to NPTs, as well as real life traces, and livestock incidents. USAHERDS also allows us to export data and generate reports as well as manage disease quarantines and associated documents. The system is limited only by our ability to populate it with useful data from CVIs, test charts, disease investigations, and livestock incident response activities. We can more readily share information with other states that use USAHERDS due to the common database structure, but it is not as easy with other state or federal databases. It is our goal to work at the national level to find ways to integrate animal disease traceability data with other databases that are in use as it will benefit all states and our national capabilities in disease traceability.

Colorado strives to be a leader in the field of ADT information sharing. By being involved in these conversations, both regionally through the Western States Livestock Health Association and nationally through the United States Animal Health Association, progress has been made on data sharing and integration. We will continue to be a leader in electronic ID and information sharing. Helping to establish a common reporting format for ADT information that will work with multiple state information databases is a priority for Colorado as this type of standard data formatting will reap dividends in regards to shared interstate livestock movement and animal ID information. CDA personnel have served on the Subcommittee on CVI XML Standards of the USAHA

Committee on Animal Health Surveillance and Information Systems. This sub-committee developed the current USAHA XML CVI Standards which has served as a template for any new electronic CVI systems so that the data transfer from the company's CVIs would easily message into USAHERDS or other databases without manual data entry. CDA is committed to continue setting this as a goal that has the highest priority; to cooperate and advance a national effort to work towards building integration between databases in order to share information without manual data entry. This is especially true as it relates to CVI livestock movement and animal ID information.

This data sharing also occurs between the USAHERDS database and the USALIMS database at AHL. Laboratory accession data is entered into USALIMS and is connected to the premises ID (PIN) or Location ID number (LID), the animal ID, and other premises information such as livestock disease incidents. CDA plans to work with Acclaim the vendor for USALIMS and USAHERDS, to develop web-service messaging that will automatically send information from the AHL or another USALIMS-user lab to a state that uses USAHERDS as their animal health database. For example; if a western Kansas veterinarian sends samples to the AHL, the laboratory accession information and test results including animal ID data on the animal would be automatically sent to the Kansas USAHERDS database in Manhattan, KS. Currently, that type of messaging only occurs from AHL to the USAHERDS database in Colorado. In addition, it is our goal to have all three Colorado State University diagnostic laboratories in Colorado able to message into our Division's USAHERDS database. That will greatly increase our traceability data on the state's livestock populations.

Another way that we want to expand upon information sharing between states is by seeking ways to increase CVI sharing efficiencies with other states. One way we are working on this is through utilization of the VET-CVI app as a tool for our accredited veterinarians. We are working with IIAD to help facilitate "automatic upload" of the import CVIs we receive and reciprocate that with other USAHERDS states as well. Currently the import and export electronic CVIs are automatically migrated into our USAHERDS system from most CVI applications. We also continue to support (through consultation, testing assistance, and in some cases monetary funding) solutions for sharing information between GlobalVetLINK (GVL) and VSPS in regards to finding a uniform reporting format for automatic sending of CVIs generated in those systems to our USAHERDS database. We will continue to look for those opportunities for improved information sharing of livestock movement and animal ID data between different databases and will help to fund those enhancements. With the VET-CVI app we would see CVIs which are generated by the accredited veterinarians and are then automatically uploaded to both the origin state and the destination state simultaneously, upon submission of the completed CVI by the issuing veterinarian. This is a pathway to improved data sharing between states and to also possibly serve in lieu of an entry permitting system. If we are receiving the electronic CVIs as soon as they are issued, the process will serve the main purpose of an entry permit system – to receive real-time information and to be able to follow up with any necessary actions. Lastly, we will continue

efforts to advance the concept of the Western Electronic System for Traceability (WEST) as a regional effort to increase data sharing between states with which we import and export the largest number of cattle.

4. Implement and Sustain Traceability Education and Outreach

The Colorado Department of Agriculture will continue to build relationships with livestock producers, livestock market owners and managers, accredited veterinarians, and other livestock affiliated groups in the state through traceability education and outreach. Attending organizational meetings with these groups, such as Colorado Cattlemen's Association, Colorado Livestock Association, Western Dairy Association, Dairy Farmers of America, CSU Extension meetings and field days, CSU Veterinary Diagnostic Laboratory board meetings, CSU Veterinary Teaching Hospital, Colorado Veterinary Medical Association, Colorado Livestock Market Association, Governor's Forum on Colorado Agriculture, and many other livestock-related meetings presents tremendous networking opportunities and helps to build trusting relationships with key stakeholders. CDA staff often makes presentations at many of those meetings and utilizes these events to assist stakeholders in animal disease traceability (ADT) education, including specific information on implementing new ways to use electronic official animal IDs or CVIs. From troubleshooting with a veterinarian about an electronic CVI issue to helping a market veterinarian understand the importance of record keeping requirements as described in the ADT rule, we are always available to these stakeholders. Keeping their needs in mind, knowing how those needs are affected by the ADT rule, and how compliance can integrate best with their business model has helped to build a trusting relationship with the state's stakeholders.

In addition, we have worked with the CSU Veterinary Teaching Hospital's field staff to move them forward in the use of electronic animal IDs and the use of electronic CVIs. By doing so, we also are educating a whole new group of future veterinarians about the increased capabilities of livestock traceability. Our Division staff also has the opportunity to present animal disease traceability presentations during their course work at the CSU veterinary school. Many of these future veterinarians will graduate and be employed in a veterinary clinic where they will teach the older generation of veterinarians how electronic animal ID can be used, utilized to improve their practice methods, and implement the use of electronic CVIs. We plan to continue to bring the new technology of electronic CVIs to the veterinary students at CSU Veterinary Teaching Hospital as a way to make ready the new wave of veterinarians that will help institute change among the veterinary profession. In addition, we will continue to keep traceability education and outreach as a priority and seek opportunities to further animal disease traceability in Colorado and across the nation.

Another important part of ADT education and outreach is staying engaged with our Veterinary Medical Officers (VMOs) here in Colorado. These veterinarians have a front line role in disease outbreak investigations and traces and are the first point of contact for accredited veterinarians in many disease outbreak scenarios. Having each of them on board and engaged with ADT within

their geographic area is critical to the efforts of education and outreach as they have experience with the producers in their area. In addition, they have built good working relationships with the livestock market veterinarians in their area.

CDA continues to assist the USDA Veterinary Services efforts in the accreditation of veterinarians that are new to our state, as well as the veterinary students at Colorado State University. Assisting with these accreditation modules, whether it is with the content or with the actual course, gives us a chance to contact these veterinarians in a face to face manner and begin a professional relationship on the right foot. It is also the perfect opportunity to educate them on the currently available options for electronic CVIs and animal ID; showing them the benefits that RFID tags can have for themselves as well as their clients, the livestock producers, and markets.

5. Continue to Increase Use of Electronic Records in the Management of Livestock Premises, Animal IDs, Livestock Movement Information, and Disease Control

Increasing the use of electronic records in all aspects of ADT is a primary goal of the Colorado Department of Agriculture. By continuing to increase the use of electronic CVIs with our accredited veterinarians, we help to make this data more searchable and accurate within our USAHERDS database. This helps us to have electronic records of livestock premises, animal IDs, and livestock movement information.

Additionally, helping veterinarians see the benefit of electronic animal ID (RFID ear tags- both low frequency and ultra-high frequency tags) in their electronic form generation (testing and vaccination charts as well as CVIs) saves them time and money while at the same time reducing the amount of manual data entry. To this end we continue to train and work with our VMOs and also make sure that both the Traceability Veterinarian and Traceability Program Specialist are available to educate and troubleshoot these electronic options with the veterinarians of our state. We provide a “help-desk” type of service to all of our veterinarians so that if they encounter any problems with using electronic CVIs, they know that they can count on our office to provide help and solid customer service. We feel it is important to support the veterinarians who are trying to change over to a new era of CVIs, and this will continue to be a priority for increasing and managing the number of electronic records in our database.

Another way that we continue to increase the use of electronic records is through our work with other states in helping them to adopt electronic CVI options for their own veterinarians. When asked by other state animal health officials, our Division staff has also shared our office processes to accommodate the increased use of electronic CVIs.

CDA has taken a leadership role with the USAHERDS User Group which is a working group of all the states that have implemented the USAHERDS database. Our staff have served in many leadership roles such as Secretary, Vice-President, and President of the group and have been active participants of the group. This group's role is to envision new enhancements, hold annual national training, have monthly conference calls, and, ultimately, to develop and implement new enhancements to the database. Colorado has taken a leadership role in the past and will continue to stay active and engaged.

As we continue to work with other states to improve traceability, whether they are using state-built databases, SCS, or USAHERDS, it will result in an increasing percentage of electronic records generated in our database and in theirs. In building cooperation and collaboration on information sharing and database integration, we will increase our electronic records to build our nation's traceability capabilities. It also serves to make data sharing more convenient and timely in real life scenarios.

We are increasing the use of electronic records by working closely with the USDA/APHIS VS to facilitate electronic options for any traceability requirements in which it may be possible to use electronic submission options. Those electronic formats of data are much easier to share and/or trace than traditional data from paper forms or submissions. The Division plans to investigate and pursue work with Acclaim, the vendor for USAHERDS, to develop and adopt an electronic form for TB test charts and Brucellosis vaccination records so that data can be automatically uploaded into USAHERDS. In addition, CDA will work with other USAHERDS states to share the funding of building enhancements to USAHERDS that will improve electronic records, data management capabilities, and functionality.

We also plan to continue to work closely with livestock auction markets to improve the animal ID records; these often play a critical role in actual disease traces and if not properly maintained, we can lose traceability at a critical juncture. We intend to have VMOs continue to work with all livestock auction markets and their veterinarians to move toward electronic record keeping.

Another component of increasing electronic records for use in disease outbreaks is making sure that we have staff within our office, as well as VMOs in the field, that are trained and familiar with the databases that will be used in these real-world scenarios. Making sure that 2-3 CDA Animal Health Division employees are trained in the use of EMRS2 continues to be a priority. As mentioned previously, all of our exercise and real-life trace-outs will be recorded in EMRS2 and EMRS2 will play a large role in a real-life disease outbreak. Additionally, keeping 2-3 employees trained, proficient, and with up-to-date access in the federal and private animal health databases is crucial in searching and conducting both NPTs and real-life trace-outs. Private databases like GVL and IMI Global, along with federal databases like SCS, SCS-Scrapie, VSPS, and the AINM are all critical in tracing a real world disease scenario. Combining the capability of USAHERDS with our familiarity with these locations and proficiency with the other databases strengthens the

emergency disease response that we can conduct in a real-life scenario.

The CDA field staff and traceability specialists at the State Veterinarian's Office have also assisted practicing veterinarians and CSU Veterinary Teaching Hospital staff in using MIM technology for capture of animal ID data when TB herd testing or in other situations. In addition, we will keep at least two CDA staff trained on use of PDAs, wands, and animal ID data capture to assist field efforts and for use in emergency management incidents. This aids animal ID data sharing and increases traceability through an expanded database of animal IDs. In the past, we have funded the purchase of equipment and will continue to support, fund, and maintain proficiency in this area.

6. Increase Compliance Activities and Enforcement of the ADT Rule

As the focus of USDA/APHIS has switched over from education to enforcement of the ADT Rule, Colorado has sought to identify compliance issues associated with accredited veterinarians, livestock markets, and livestock owners. We proactively continue to educate the stakeholders with the thought that it is easier to prevent problems than it is to correct problems that have already occurred. The CDA office processes for traceability include monitoring all CVIs for "important" and "critical" criteria by the Division personnel. We have set up a flow chart for what constitutes "important" and "critical" data on the CVI; we then have different approaches for addressing these non-compliance issues. CDA is focusing on tracking critical compliance issues with veterinarians; these would include not issuing regulation-compliant interstate CVIs or not recording official animal IDs on their CVIs as required by the ADT Rule.

There is a wide range of compliance issues uncovered through this process but we approach each on a case-by-case basis with respect for each individual veterinarian and their unique situation. The data that we track is monitored by the use of trends and has helped immensely in obtaining better compliance. By tracking critical data on CVIs along with individual veterinarian compliance issues we are given an opportunity to turn more veterinarians towards the use of electronic options for issuing CVIs. This step alone continues to decrease the amount of CVI compliance issues that we see as it is more difficult to submit an incomplete or incorrect CVI through electronic means than through paper means. In addition, tracking veterinarians' compliance helps to educate and coach them in appropriate traceability practices and activities. For example, when veterinarians are not submitting their CVIs to our office within a week, it provides an opportunity to discuss the entire process from their submission to our requirement to submit the CVIs to the state of destination within 7 days. This communication with the veterinarians also addresses how electronic CVIs can provide better real-time information to both the state of origin and the state of destination in addition to helping the veterinarian to remain in compliance. It

also opens up doors to discussing their other record keeping requirements such as official animal ID tag distribution and the recording of animal ID tags on the CVI when the CVI includes cattle over 18 months of age.

In Colorado we have feedlots that can register as Colorado Approved Feedlots which requires that the feedlots agree to use a higher standard of animal disease traceability than traditional feedlots. By doing so, they fulfill and surpass some of the normal import animal ID regulations. Many of the Colorado Approved Feedlots (CAF) have also become official Approved Tagging Sites. The Division will set a priority to get more of our CAFs to be official Approved Tagging Sites as prescribed by the ADT Rule. The existing Approved Tagging Sites will be monitored for rule compliance in order to gain better traceability through the application of official ID tags and record keeping.

We will also continue to utilize the USDA/APHIS tools for IES enforcement actions when necessary. An official letter, then a consultation, and finally (if necessary) an IES investigation are the tools that are used to discuss accreditation responsibilities with accredited veterinarians. We want to continue to hold accredited veterinarians accountable for their actions and their ability to do things the right way. We have developed an audit/assistance visit template for our VMOs and office veterinarians to use when having discussions with accredited veterinarians. Touching base with practicing livestock veterinarians and checking in on how they are keeping records of animal tagging, records of CVIs, and how they submit information on reportable diseases are all opportunities to help the accredited veterinarians of Colorado uphold the high expectations that we have for them.

We have created an ADT compliance tracking system within USAHERDS to monitor compliance issues with both import and export CVIs. This system will allow us to better track compliance issues and quickly address them with accredited veterinarians as they arise. We will also include our VMOs in these conversations with veterinarians in their geographic regions. Our philosophy is that we use non-compliance situations as opportunities to coach and train veterinarians in new methods and processes that will result in improved animal disease traceability.

7. Monitor and Report on the Administration of Official Identification Devices and on the Interstate Livestock Movements Imported and Exported from the State via CVIs

We are committed to finding ways to increase our efficiency in regards to reporting and completion of quarterly reports on animal IDs and livestock movements to the USDA/APHIS. We currently track this information through more than one source, mainly using USAHERDS, the GVL database, and VSPS to generate custom reports. We use spreadsheets and pivot tables to give us the numbers requested for those reports and reviews with USDA/APHIS. This also serves as a way to continue to track our own performance on retrieving traceability information, our

performance on the NPTs, and our progress in our Division performance measures for the CDA Performance Plan. We will continue to look for new ways to export our data to provide better reporting. For example, we were recently able to improve our reporting by developing a way to report to USDA Veterinary Services the number of cattle officially identified on interstate CVIs or other movement documents for shipments into Colorado. USAHERDS is a flexible database and we are committed to working with the database vendor, Acclaim, to improve upon both the reporting capabilities and how searchable the database is in order to best serve the needs of Colorado.