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Wyoming State Veterinary Laboratory

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University of Wyoming

## WSVL NEWS

### Message from the Director:

Thank you again for your continued support of the Wyoming State Veterinary Laboratory. Since the last newsletter, the WSVL has undertaken several projects in relation to improving the services we provide.

Perhaps most visibly, we initiated our new computer system in July. The old system was obsolete and was not compatible with "Y2K". The new system adds several features to our communications. First, each laboratory section is linked, so no matter who you call in the laboratory, they should be able to "pull up" your case and give you up-to-date information from all areas.

The new system also allows for automatic FAXing of results. Thus, a diagnostician can directly FAX a report to you from their desk. That feature requires, however, that the recipient have a dedicated FAX line. Otherwise, we can still print reports and hand FAX as before. The bills will appear differently also. You may receive two bills, one from the old and one from the new, until we have cleared all of our cases from the old system.

We welcome suggestions about the report format. Please be aware, however, that there are limitations to our ability to customize the reports. However, recently, a client indicated that it was difficult to file the 3 page report (space). In response, we were able to insert owner/animal information on each page. Thus, if filing space is a concern, only the pertinent page has to be filed in the case record, without the title page. In the future, we hope to be making case reports available on the WEB (by password) and by email to our clients. Hopefully, our summary annual reports will also have better information from the new database.

In other areas, the American Association of Veterinary Laboratory Diagnosticians (AAVLD) accreditation team visited us in July as part of our routine 5 year re-accreditation cycle. The AAVLD is the organization that accredits diagnostic laboratories for competence in diagnostic testing. Although their report is not completed, they had favorable comments and suggestions for us. Their final decision on this 5 year accreditation will be made at their annual meeting in October. Suggestions that were made related to our funding needs for replacing obsolete equipment, adding safety equipment in pathology, and lack of depth in some staffing areas.

The WSVL Advisory Council was very helpful with this visit and as always, was very supportive. The members of that group include Drs. JD Fox (Cheyenne), Mike Driscoll (Cheyenne), Jim Briddle (Riverton), and Jim Logan (State Veterinarian; ex-officio, Cheyenne), along with Mr. John Morris (Cheyenne), Mr. Bill Lambert (Osage), and Mr. Ed Weppner (Cheyenne). They have been instrumental in helping keep this laboratory running and relevant to animal disease problems in this state.

In addition to the computer system and AAVLD accreditation efforts, the laboratory has selected a new

logo (see top of Page 1). This logo was designed by Dr. Carolyn Gunn, DVM from Jackson Hole, Wyoming. Dr. Gunn was mailed a \$100 prize check this week. Thank you to Dr. Gunn and all the other participants who submitted ideas for our logo.

The Wyoming Veterinary Medical Association named the laboratory as one of the beneficiaries of their auction at the annual meeting in Thermopolis. Their continued support is much appreciated. The meeting was well attended and several WSVL diagnosticians presented cases with practitioners again this year at the meeting.

The laboratory is continuing to develop communications with clients. Dr. Lynn Woodard is working to develop our home page. In addition, this newsletter is being developed. In this issue, sections about new testing that is available, recent cases and trends of interest from our submissions, and an article regarding a topical subject (Dr. Woodard has prepared a discussion of drought related diseases in cattle for this issue).

Thank you again for your continued support for this program. Your input is greatly appreciated. Please let us know about how we can improve service, new tests that may be useful, or other related issues.. Call, send an email, write, or visit us anytime!

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### **The WSVL Expands Immunohistochemistry Testing**

We have added several new tests to our immunohistochemistry diagnostic service. The new tests, now available upon request, include detection of equine herpesvirus-1 (EHV-1) and infectious bovine rhinotracheitis (IBR or bovine herpesvirus-1) antigens in formalin-fixed tissues. These new tests should greatly enhance our ability to detect and diagnose these two significant causes of abortion and other disease in horses and cattle, respectively. If immunohistochemistry for EHV-1 or IBR are desired, please include this information on the submission form. In some cases, the pathologist on duty may request these tests when gross or microscopic lesions in submitted samples suggest EHV-1 or IBR as the cause of morbidity or mortality. In addition to these two new assays, we are currently in the process of developing new immunohistochemical assays for tumor markers in small animals and several more immunohistochemical assays for detection of infectious disease agents in both small and large animals. We will keep you informed about developments in this field in future newsletters.

Todd Cornish, DVM, PhD, Diplomate ACVP. Dr Cornish is a diagnostic pathologist with the WSVL. In addition to special interests in arbovirus diseases and diagnostic veterinary pathology, Dr. Cornish is very interested in developing new IHC assays to assist in diagnosis of infections and tumors.

### **Recent Cases and Trends**

#### *Cattle:*

Drought-related diseases such as polioencephalomalacia due to salt and sulfate have been identified this summer. One case of PEM was due to dehydration. 5 yearling beef cattle died and 15 had residual effects

from the water deprivation in Southern Wyoming.

We had a classic case of brand scar adenocarcinoma in a cow. There are not many published reports on this, but the condition is common in Wyoming. These tumors will eventually metastasize, although they are slow to do so. If large, ulcerated and unsightly, they may be considered an animal welfare issue by authorities and packers.

A liveborn calf with congenital displacement of the heart in the upper cervical area (ectopia cordis cervicalis) was diagnosed in a newborn full term male calf. This is a rare spontaneous (idiopathic) abnormality of calves.

Early in the season, a case of cervical rabies was diagnosed in a cow from Fremont County. Skunk rabies has moved into that area. Apparently the cow presented with ataxia. The cerebral tissue was negative for rabies by FA, but the cervical cord and brainstem were positive.

30 yearling steers became ill and several died after ingesting arsenic. The arsenic residue was traced to an aged and abandoned storage barn into which the steers had recently broken. The dosage was sufficient that animals developed neurological signs without the hemorrhagic diarrhea usually expected for inorganic arsenic poisoning.

#### *Horse:*

This spring a suspect EHV myelitis was diagnosed in an unvaccinated mare from Eastern Wyoming. This case did not confirm on IHC, but the lesions were suspicious.

#### *Small Companion Animals:*

A case of fatal *Strongyloides stercoralis* was diagnosed in an 8-week old pup with concurrent canine coronavirus infection. This is a zoonotic agent that is well adapted to warmer climates. This dog came from a puppy farm in Wyoming. Apparently local authorities and CDC became involved since there was some human risk of exposure. The main message for practitioners is that some breeding kennels even in a cool, temperate area have an endemic problem with this parasite, and it does represent a zoonotic risk to veterinarians and their staff, as well as to the general public.

The laboratory was presented with a classic case of dysautonomia in a Pomeranian dog. The practitioner had diagnosed the case before presentation to the WSVL.

Zinc phosphide rodent bait killed a dog from Central Wyoming. This case is a reminder to be careful about storing of pesticides away from pets and livestock.

#### *Wildlife:*

The laboratory was presented with several canine distemper cases in skunks and raccoons in early summer. The animals were in the Southern part of the state. Distemper, like rabies, can cause clinical signs related to the nervous system. Thus, any wild animal that is displaying abnormal behavior should be handled with extreme care.

### **Drought-Associated Livestock Diseases:**

WSVL has been seeing or consulting on several disease problems that are more likely with the extremely

dry conditions over most of Wyoming. Press and radio spots have gone out to make producers aware of some of these and advising them to consult with their local veterinarians.

Pulmonary emphysema and edema associated with sudden change from dry pastures to meadows, especially regrowth meadows after haying, could present quite a challenge to practitioners. Most ranches don't normally move to meadows until after heavy frosts, but this year many are already doing so and cow asthma is showing up. Ionophores will prevent ABPE if fed in advance, but many cows won't eat the blocks and still be affected. Advise clients to keep a very close eye on cows for a few days after a change to meadows. Gradual adaptation is an option.

Polioencephalomalacia due to high sulfate water and water deprivation ('salt poisoning") are on the rise. You may want to advise clients to test stock ponds for sulfate levels. Merl Raisbeck here at WSVL has a rapid test that should be adequate for screening.

BRSV could be quite serious this year with all the dust irritation. Use MLV vaccines with preconditioning shots to help avert it. The killed products have, in some cases, actually increased the lesion severity in BRSV outbreaks.

Lynn Woodard, DVM, PhD is now the extension veterinarian at WSVL [Return to Archives](#)