

Illinois Department of Agriculture Animal Disease Laboratory

Laboratory Notes

June 1, 2013

Meet the Staff

Terri Howard is the office supervisor for the laboratory. She has worked for the laboratory since 1984 and is one of the longest serving staff in the laboratory. Terri is responsible for the day-to-day function of the clerical staff and also serves as the deputy quality control manager. She is responsible for timekeeping for the staff, control over our physical inventory, ordering equipment and supplies, and managing all the extensive paperwork that goes along with our quality control system.



Terri has been married to Mike Howard for 29 years. They have 3 children, all Yorkshire terriers. She enjoys knitting, reading, sewing, and NASCAR, where she roots for Jimmie Johnson.

Laboratory Supplies

The Animal Disease Laboratory has a few supplies that can be provided to veterinarians, generally at cost. We are required to charge for shipping and all laboratory supplies will have an accompanying shipping charge.

Blood boxes- We recycle and reuse federal blood boxes as long as they are suitable for their purpose. They are shipped to practices upon request in whatever quantities are needed.

Trich pouches- InPouch™ *Trichomonas foetus* test pouches for preputial or vaginal washings from cattle are available at a cost of \$8.00 each.

Campylobacter culture tubes- Tubes with culture medium for the isolation of *Campylobacter foetus* from preputial washings from cattle are available from the laboratory at a cost of \$2.00 per tube.

If you will need a large number of InPouch tests or *Campylobacter* culture tubes, please contact the labor-

atory well in advance of the test dates.

Testing forms and ear tags- As indicated in the last issue of Lab Notes, the Animal Disease Laboratory now handles and ships most federal and state testing forms, brucellosis vaccination ear tags for cattle, and official ID ear tags for cattle and swine.

Testing Information

Johne's disease- The Animal Disease Laboratory is now approved to perform ELISA tests for Johne's disease on milk samples. At least 2 ml of milk is needed. The test determines the presence (or absence) of antibodies against *Mycobacterium avium* ssp *paratuberculosis*. The test is intended for use on individual lactating cows; pooled samples from multiple cows, milk from bulk tanks, colostrum, or samples from cows less than 3-days fresh are inappropriate samples. Samples that are curdled or contain "flakes" or clots are unsuitable for testing and will be discarded. Milk should be submitted with coolant packs in tightly closed containers.

Fecal culture remains the gold standard for detecting shedders. The cELISA test is \$5.00 per milk sample. For information on interpretation of the milk ELISA test, please see:

http://ahdc.vet.cornell.edu/docs/Johnes_Milk_ELISA_Fact_Sheet_for_Veterinarians.pdf

Equine Infectious anemia (EIA)- EIA testing is now done at the Animal Disease Laboratory. The agar-gel immunodiffusion test (Coggin's test) is \$8.00 and takes 24 hours to run. The cELISA test for EIA is a one-day test and can usually be done within one day of receipt. The cELISA test is \$10.00 per sample. Results of EIA testing will automatically be FAXed to your clinic and the original test reports will follow by mail.

We were recently audited by the USDA on our EIA testing and accessioning procedures. It was emphasized that it is extremely impor-

tant that the paperwork for EIA testing is filled out completely and accurately. The form should have no blanks; all boxes should contain an entry, a line, or NA. The narrative portion must be filled out as well as the drawing portion and the narrative description must match the drawing. Samples submitted with incomplete paperwork will be held and you will be notified of the problem. Correct paperwork will be required before testing is done. We were also informed that federal regulations require that we give each sample a unique accession number and there will be a \$2.00 accession fee added (per statute) per horse/sample to cover costs of paperwork and reporting.

Canine brucellosis- The canine brucellosis card test is no longer available at the Animal Disease Laboratory or anywhere else, as far as we know. The manufacturer has discontinued production of the test. Samples received for canine brucellosis testing will be forwarded for testing to the University of Illinois Veterinary Diagnostic Laboratory for the indirect fluorescent antibody test at \$31.25 per test.

Equine Uterine Cultures and CEM

Taylorella equigenitalis, a Gram-negative bacterium is the causative agent of contagious equine metritis (CEM). The disease is exotic to the United States; however, several US outbreaks have occurred in the last five years.

The organism is fastidious and difficult to grow without special media. Cultures must be held a minimum of 72 hours and the organism can be found as late as 14 days after inoculation. The Animal Disease Laboratory holds equine uterine cultures for 5 days to help ensure we don't miss any possible CEM isolates. However, there are no APHIS-approved CEM laboratories in Illinois and requests for official tests (export or import) must be referred to APHIS-approved CEM laboratories (see

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http://www.aphis.usda.gov/animal_health/lab_info_services/approved_labs.shtml.) Cultures must arrive at the testing laboratory in time to be plated within 48 hours after sampling.

Formalin

Follow instructions carefully when mixing formalin from concentrates. We occasionally get tissue samples in adequate amounts of liquid that are not fixed when they arrive at the laboratory and suspect formalin mixing error as the culprit.

Porcine Epidemic Diarrhea

Porcine epidemic diarrhea (PED) is a foreign animal disease that has been recently diagnosed in the United States. The causative coronavirus is antigenically distinct from transmissible gastroenteritis virus (TGE), but the disease it causes is clinically similar. PED should be suspected when a TGE-like illness is detected clinically in a herd where polymerase-chain reaction (PCR) tests, immunohistochemistry, and fluorescent antibody tests for TGE are negative. Samples to be submitted for testing and disease management are the same as for TGE. If tests for TGE are negative and PED is suspected, we will forward samples to NVSL and keep you apprised of the testing progress.

Sample Shipping Labels

Prepaid preaddressed UPS shipping labels are available for submitting samples to the lab. Please contact Terri Howard for details.

Cases from the ADL files

A rabbit producer submitted **several young rabbits** with central nervous signs. Histology revealed nonsuppurative encephalitis with several cross sections of nematodes constant with *Baylisascaris procyonis*. The migrating larvae of *Baylisascaris procyonis*, the roundworm of raccoons, can cause disease in mammals (including human beings) and poultry.

An aborted puppy, in the last trimester of gestation, was submitted with its placenta for necropsy. The dog that aborted was owned by a breeder that had recently acquired a male dog from Missouri. Microscopically, the puppy had no significant lesions; however, the placenta had minimal placentitis with large numbers of bacteria in trophoblasts. Cultures of the placenta and lung produced *Brucella canis*. Brucellosis should always be kept in the back of your mind whether the late-term abortions are pigs, cattle, or puppies.

Serology

Spring is turning to summer and fair season is upon us. Please encourage your clients to let you draw blood samples as soon as possible within the limits of the health certificate and submit them promptly. We are still very short handed in serology and people with "emergency" samples are likely to be disappointed.

We have had to develop the following schedule to allow us to manage the serology load:

- EIA AGID: Mon - Thur
- EIA ELISA: Mon - Fri
- PRV: Tue and Thur
- PRV g1: Monday
- PRRS: Wed and Fri
- Brucellosis: Tue and Thurs (STT on Tue only)
- AI AGID: Mon - Thurs
- Johnes, M. hyo, and SIV: Fit in as needed and time permits.

Laboratory Calendar

Please be aware that, along with all other state agencies, the diagnostic laboratory is closed on the following days.

- New Year's Day
- Martin Luther King Day
- Lincoln's Birthday
- Washington's Birthday
- Memorial Day
- Independence Day
- Labor Day
- Columbus Day
- General Election Day
- Veteran's Day
- Thanksgiving and the day after

- Christmas Day

As always, submissions can be left at the lab on holidays by placing them in the night depository on the northeast side of the building, which has outside access. This night depository door is always available should you or a client desire to deliver submissions after hours, on weekends, or on holidays.

Departmental Website

Please visit the Illinois Department of Agriculture website for the latest version of our submission forms and our test list. Enter agr.state.il.us in your web browser, select Animal Health and Welfare from the menu on the left of the screen, and then choose Animal Laboratory Services from the drop down menu. The first edition of Lab Notes is there for your perusal and, for your convenience, we have listed a link to the University of Illinois Veterinary Diagnostic Laboratory's test list and fee schedule.

Laboratory forms

The cost of shipping today is skyrocketing. Some packages we receive have \$50.00 or more in shipping costs alone. This, plus the time it took you to procure the samples makes today's laboratory submissions very expensive, even before laboratory costs are accrued. Please take just a few extra minutes and fill out the submission form carefully and completely. Remember that we are blind; the only information we have about the situation is what you tell us. Imagine how difficult it would be to diagnose a problem if you didn't even know the signalment (species, age, breed, sex, etc.) of the animal. Remember, the job's not finished until the paperwork is done!

Questions and Guidance

Laboratory personnel are always happy to provide guidance on sample collection, preparation, and submission. Don't hesitate to call (309 344-2451) for information or advice. We look forward to assisting you in any way we can.

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