

Why Necropsies are So Important

By Laurie Seale

I can't stress to you enough how important it is to do a necropsy on the animals that die on your farm. If all you do is bury them, you are not learning how to treat the next animal that becomes sick.

From year to year, diseases on your farm can change. What drugs worked in the past may not work in the future. Therefore, a necropsy is necessary when the drugs you have used successfully in the past are no longer working.



Normal lungs are light pink in color as shown in this picture

I have sent tissue samples to numerous labs over my 30 years of deer farming and most of the times have been very disappointed in the results. It cost me a lot of money and most times there was not any conclusive reasons for the death of the animal.

For the past five years or more, I have been sending all of my samples to Newport Labs and have had great results. If they are sent good tissue samples that are handled correctly, they will be able to tell you what the problem was and what drugs work best for the problem at hand. Many times they will have the results back to my vet within a week (or slightly longer) which is a very good turnaround time. My vet then forwards the results to me.



Lungs that are red in color are not normal

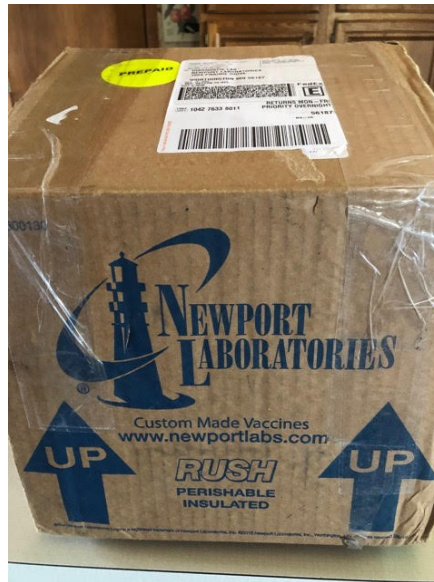
Fresh tissue samples are the key. Fawn necropsies are so easy to do and take very little time. I collect the tissue samples as soon as I find a dead animal and place them in Ziploc bags. I then place

them immediately in the refrigerator until I can get them sent. Do NOT place them in the freezer!



Intestines showing signs of disease (yellow is not normal)

Newport Labs will send you a convenient Styrofoam box (order prior to needing it) to ship the samples in and the freight is prepaid so all you have to do is find a Fed Ex distributor and it will ship overnight to them. They immediately ship an empty container back to you for use the next time it is needed. They make things extremely easy for you.



Shipping container provided by Newport Labs

This past fawning season was a bad one for Wisconsin. We had cold, wind and rain which ultimately led to sick fawns. I had a few fawns that developed Ecoli and my normal go-to drugs, Baytril and Exceed, did not work so the fawns eventually died. I sent in tissue samples and the results came back showing the Ecoli was resistant to Baytril and Exceed. The only susceptible drug was Gentamicin, so once I learned what drug to use I was able to treat new cases successfully. Without this knowledge, I would have continued to lose fawns to Ecoli.

According to Josh Newton from Cervid Solutions, there are over 70 different types of Ecoli. The Optimizer Gel that I recommend to every deer farmer for newborn fawns only has antibodies to cover four different Ecoli. This is why I tell people the Optimizer Gel is not going to completely eliminate fawn scours, but it will prevent 90% of them. Cervid Solutions' vaccine only covers 5 or 6 of the most common Ecoli diagnosed on deer farms. There is no product out there that covers every strain of Ecoli; therefore, necropsy reports are absolutely necessary when an outbreak occurs on your farm. Knowledge is Power!

Sample Submission Form

Make sure to check the "antibiotic sensitivity" so your final report will show the drugs susceptible and resistant to the disease.

Tissues Submitted:
Include number of each if applicable.

Blood sample _____
Brain _____
Lung _____
Heart _____
Liver _____
Kidney _____
Lymph Node _____
Intestine _____
Colon _____
Feces _____
Other _____

Plate/Slant _____
Origin _____
Isolation Date _____

Swab Origin _____
No. Submitted _____

Other _____

Save Isolates
 Yes No

Examination Requests

Leave to the discretion of Diagnostician

_____ Aerobic Culture
_____ Anaerobic Culture
_____ Antibiotic Sensitivity
_____ Fusobacterium Speciation PCR
_____ Clostridium perfringens Typing PCR
_____ EHDV/BTV Multiplex Detection PCR
_____ EHDV Virus Isolation
_____ EHDV Full Genome Sequencing
_____ BTV Virus Isolation
_____ BTV Sequencing
_____ Fecal Exam
_____ Mycoplasma Detection PCR
_____ Mycoplasma Culture
_____ Histology
 Fixed tissue sent

Other Instructions: _____

NECROPSY RESULTS

All three submissions showed resistance to Enrofloxacin (Baytril) along with almost every other drug, but it was susceptible to Gentamicin.

P28 - Cervidae		
Isolate 2 - E. coli NH smooth	Ampicillin 10mcg	Resistant
	Ceftiofur 30mcg	Not Tested
	Enrofloxacin 5mcg	Resistant
	Florfenicol 30mcg	Resistant
	Gentamicin 10mcg	Susceptible
	Neomycin 30mcg	Resistant
	Oxytetracycline 30mcg	Resistant
	Penicillin 10units	Resistant
	Spectinomycin 100mcg	Resistant
	Tiamulin 30mcg	Resistant
	Tilmicosin 15mcg	Resistant
	Trimethoprim/Sulfa 25mcg	Resistant
	13Jun19 AD	

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L34 - Cervidae		
Isolate 3 - E. coli NH mucoid	Ampicillin 10mcg	Resistant
	Ceftiofur 30mcg	Not Tested
	Enrofloxacin 5mcg	Resistant
	Florfenicol 30mcg	Resistant
	Gentamicin 10mcg	Susceptible
	Neomycin 30mcg	Resistant
	Oxytetracycline 30mcg	Resistant
	Penicillin 10units	Resistant
	Spectinomycin 100mcg	Resistant
	Tiamulin 30mcg	Resistant
	Tilmicosin 15mcg	Resistant
	Trimethoprim/Sulfa 25mcg	Resistant
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P32 - Cervidae		
Isolate 4 - E. coli NH smooth	Ampicillin 10mcg	Resistant
	Ceftiofur 30mcg	Not Tested
	Enrofloxacin 5mcg	Resistant
	Florfenicol 30mcg	Resistant
	Gentamicin 10mcg	Susceptible
	Neomycin 30mcg	Resistant
	Oxytetracycline 30mcg	Resistant
	Penicillin 10units	Resistant
	Spectinomycin 100mcg	Resistant
	Tiamulin 30mcg	Resistant
	Tilmicosin 15mcg	Resistant
	Trimethoprim/Sulfa 25mcg	Resistant
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