

# **Mycoplasma Haemolamae**

## **“The Silent Killer”**

Saving your alpacas' life from one of the known alpaca diseases that you may not have heard of, but should be aware of, is Mycoplasma Haemolamae (MH). It is a Silent Killer! MH has been detected since the 1990's and was called Eperythrozoonosis or EPE. Recently the name has changed in the medical community for camelids, but it's still the same disease. Alpaca health is very important to an alpaca business. Educating yourself about this disease will help protect your investment and your beloved alpacas.

### **Important Information:**

If you have an animal that is lethargic with chronic weight loss, chronic diarrhea and has light to heavy anemia you should consider Mycoplasma Haemolamae (MH) as a possible cause and start tetracycline treatment immediately. Weight loss can be +/-  $\frac{3}{4}$  of a pound per day, lethargy and anemia happens very quickly. Then the alpaca can die within days without treatment. The alpaca's response will be quick and over the 10 days of treatment they will respond with weight gain, less lethargy and less anemia until they are back to normal and gaining their weight back in just a short period of time. **(See “Treatment” below)**

Mycoplasma Haemolamae is a bacterium that attaches itself to the red blood cells of an alpaca. The immune system recognizes this as a problem and destroys the affected red blood cells. Your alpaca then becomes anemic. In the majority of alpacas infected with these bacteria, there are no signs of the disease. If your animal becomes immunocompromised through another one of the alpaca diseases or is stressed from a move, birthing, weaning, shipping or through other environmental changes, MH can rear its ugly head. Because of the immunocompromised condition of the alpaca, other opportunistic parasites like strongyles, nematodes, coccidia, EMAC, clostridium A, B, C, SNOTS etc., can quickly infect the alpaca and MH symptoms could be masked by the similar symptoms from these other parasites and illnesses. Many animals have died from Mycoplasma Haemolamae with an incorrect necropsy. Most vets and/or labs do not look for MH during necropsy or even during standard blood panels. What usually comes back from a blood panel is anemia with high counts of white blood cells indicating potentially lymphoma. If you have a blood panel done by your vet and the white blood cell count is very high consider MH. It has been found that miss diagnosis of the blood panel can lead to, lymphomic cancer diagnosis in your alpaca. This should be an alarm and treatment for MH and you should start immediately to prevent death. Use tetracycline treatment prior to other treatments to be sure. Don't let your alpaca die from not trying. After the full treatment is completed, request another blood panel and compare with the first approximately 10 days after treatment has ended. The white blood cell count will be down significantly and continue to drop to normal counts over time. This has amazed many vets had who were sure the alpaca potentially had cancer. Many alpacas have been put down or left to die after the cancer diagnosis. Why not treat with tetracycline?

The disease can manifest as an acute problem. Your alpaca may suddenly be unable to stand and be extremely weak. Or it may be a chronic problem. As mentioned before, your alpaca may have chronic weight loss and lethargy. Diarrhea, moderate to severe may accompany the many symptoms during the failing health of the alpaca. Anemia is one of the last symptoms to appear. Check for anemia by raising the eyelid of the alpaca. Look under the eyelid it should appear bright pink and/or red looking (healthy). This is called the FAMCHA method found in the sheep and goat industry. Pale pink and/or white or almost white is close to death by intense anemia.

If you suspect infection with *Mycoplasma Haemolamae*, have your vet do a PCR (polymer chain reaction) test from Oregon State University (OSU). This test amplifies the DNA so low levels of the bacteria can be detected on the red blood cells. In case you cannot get the PCR results back from your vet or lab in a timely manner like (1-3) days, start treatment immediately, especially if you have exhausted all other potential causes.

This disease is a “**Silent KILLER**” and once your alpaca is weak and down it is only days to hours to save their life, maybe. If your vet has drawn blood for testing, ask for the blood to be tested by Oregon State University. OSU has the only lab testing for MH in the country. OSU holds the patent for the process and I have not found another lab or university who performs the testing. If blood is sent for testing it must be in a purple top test tube, handled and processed properly and delivered immediately to OSU. OSU will provide your vet with the handling and shipping procedures, found on their web site. OSU does testing on Thursday's and if your sample arrives late it does not get tested until the next testing day which is Thursday of the next week although they claim 1-3 days turn around. Results can be delayed causing death prior to receiving them. Also, if the blood is handled improperly or the alpaca has had antibiotics and/or some types of worming medication prior to testing, the results can be affected. Start treatment of your alpaca(s) immediately after the blood draw with tetracycline and then wait for the results from OSU. You will find that if it is positive for MH your ahead of the death curve. If it is negative you have not hurt your alpaca with tetracycline treatments.

### **Treatment:**

*Mycoplasma Haemolamae* is treated with tetracycline (LA200) (other brands of tetracycline are available but make sure they are the same strength as LA200) at your local farmer's co-op a very common across the counter antibiotic and inexpensive.

**The dosage used is: (.045) X (body weight) subcutaneously 1 dose given every other day for 5 treatments. (4.5 cc per 100lbs). (5 doses over 10 days.)**

Tetracycline is an over the counter drug and does not need to be prescribed by your vet. Check with your vet or refer to the Norm Evans Field Manual for dosages if you are unsure.

Unfortunately, it appears that tetracycline does not completely rid the infected animal of these bacteria, but only lowers it to safe undetectable levels enough to save your alpacas' life.

This is one of the alpaca diseases thought to be spread by blood. Blood sucking insects such as biting flies, mosquitoes, lice, fleas, and ticks should be kept to a minimum on your farm. Only use a clean unused needle on each individual alpaca when giving injections. Needles are cheap. There is no reason to reuse a needle on another alpaca and risk the chance of transmitting any disease (besides, you dull the needle after the first use and it hurts more). Biting flies can be controlled by placing fly predators around poop piles and in areas of fly population. (search: (fly predators) on the net - they really work) Fly traps and Fly Stiks help as well but do not eliminate the root of the problem like fly predators, they really work cutting the fly problem by 70 to 90% in a season. They last for 2-3 years or more without placing more. Having chickens free range with your alpacas can eliminate many parasites like ticks, fleas and mites, (1 chicken can consume 500 ticks per day) plus fleas and other biting and sucking insects.

Yearling alpacas, cria and pregnant females seem to be affected much quicker than an adult. Test and treat your suspected alpaca(s) who seem to have chronic weight issues. Then if positive consider treating others or all in the herd having similar weight loss issues. **Watch weight closely as it is the primary symptom** recognizable (+/- ¾ lb per day) without the interference of other opportunistic parasites. Purchase a good scale and use it. It is worth its weight in gold.

Treated animals usually go on to live a long healthy life. Even though they have not gotten rid of the disease, they can live with it..

**It's important to weigh or evaluate alpacas when sheared. Learn body scoring if you do not own a scale, so you can spot a thin alpaca being a potential carrier of Mycoplasma Haemolamae.** The MH carrier may look fine, you bring them home and potentially they can infect others in your herd causing problems. Biting fly's can be found everywhere and your alpaca can be bitten at your farm, during transport or even at an alpaca show and now become a carrier. A carrier can be healthy not showing signs for months or even years and maybe never.

Mycoplasma Haemolamae is thought to be in 70% or more of Camelids (alpacas and llamas) in the United States and now is thought to be world wide. (Ref: Norm Evans) More studies are being done to try and eliminate alpaca diseases. Until something better is found for MH, keep the insect population down on your farm and test and treat to keep it in check if it is present.

It is important to follow up treatments of MH with a series of herbs, minerals and vitamins to assist your alpaca's immune system recovery.

**Remember: Your Vet Does Not Save Your Alpaca's Life. YOU DO!**

Here's a couple of interesting facts about camelid red blood cells:

- They have a lifespan of 235 days vs. 100 days for human red blood cells
- Camelids have oval red blood cells instead of round like other mammals. This gives them a larger surface area so there is better oxygen exchange which helps them survive at higher, thinner air altitudes in their native South America.

The unusual shape of an alpaca's red blood cell makes understanding alpaca diseases a challenge to veterinarians.

### **My Personal Opinion:**

My personal opinion is that hundreds if not thousands of alpacas die in the U.S., yearly from MH without the knowledge of the vet or the owner. Most times the death is blamed on something else, failure to thrive, heat stroke, internal parasites, cancer etc. How many times was this just an "educated guess"? I think many!

"I am not a vet", but an experienced alpaca owner. When I say experienced I mean, having experienced the effects of this silent killer disease first hand. I have seen animals die on my farm and many other farms, with most necropsies determining the death of the alpaca was from common parasites, heat stroke, failure to thrive or some other educated guess from the vet(s). This is done without the exact testing for MH. Without testing it is the vet's best guess. Remember, other parasites become opportunistic and flourish during the process of this disease, including cancer. The alpaca cannot fight anything else because it is busy fighting MH by attacking its own red blood cells, hence anemia. The alpaca dies quickly. Once you see an alpaca die from this disease with parasite and other medical treatments doing nothing to stop it you will never let it happen again!

I am not a vet, but an experienced alpaca owner. If you are not sure about the advice and information I have given, call your vet and discuss MH with them prior to treatment, then get a second opinion and maybe a third. Just act quickly!

When you hear of multiple death's on alpaca farm(s) around the country it creates the alpaca disease of the year fear. It seems every year something new hits, SNOTS, EMAC, Barber Pole Worm and so on, and the blame is placed unknowingly on the new found disease of the year. Then the "experts" begin to give a series of seminars on the new disease of the year fear. Be safe rather than sorry and treat for MH during these so called outbreaks and you may save your alpacas' life.

Giving LA200 in the dosage mentioned earlier is Risk Free and can do nothing to harm your alpaca, and it can't hurt even if the alpaca is by chance, ill from something else. Most vets do

not recognize the deadliness of this disease and little is written about it, even in the Norm Evans Field Manual, it is just a mention. The articles I have read **do not** stress the seriousness or deadliness or even the treatment of MH.

Educating yourself can save your alpaca investment, money spent on vet assistance and your alpacas.

**Feel free to copy this information and pass it to other alpaca owners.**

### **Knowledge is Power!**

Be aware, I am not a trained vet and many may poo-poo this article. Time will tell... To date, passing this information has saved >hundreds of alpacas and I am sure many more to come!

The word is getting out and alpaca lives are being saved, but even as you read this article there is an alpaca dead or dying from Mycoplasma Haemolamae unbeknownst to their owners and their vets.

Thank you for the information about MH found on the web at: [www.owning-alpacas.com](http://www.owning-alpacas.com) , Oregon State University, Norm Evans and input from multiple alpaca farms who have experienced this Silent Killer.

Alpaca owners, potential owners, vets', techs' if you would like to discuss this further or if you have any questions contact me anytime.

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