

MARIA STEIN ANIMAL CLINIC, INC.

April 2018

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<i>Michelle M. Michalak, DVM</i> <i>Mark E. Hardesty, DVM MS</i>	<i>Laura A. Nusbaum, DVM</i> <i>Andrew H. Lefeld, DVM</i>	<i>Brandy A. Liles, DVM</i> <i>Emily L. Stayduhar, DVM</i>	<i>Angela M. King, DVM</i> <i>Paul J. Hunter, DVM</i>

Dr. Nusbaum Attends Zoetis meeting Dr. Laura spent two days taking in Vic Cortez's current thoughts on immunology. The biggest change from last year is the continuing development of dominant antigen theory. These thoughts will influence the next changes we make in your vaccination programs and may explain some failures that we didn't expect. In a world looking for simplicity, this might become more complicated.

The first point is that clostridials given at the same time as other vaccines cause less response to the other vaccines. Do we have the facilities and ability to split up these vaccines. We have commonly given Ultrabac 7 or Alpha 7 at the same time as Bovishield to 5 and 6 month old heifers. We should probably split those up by 2 weeks. We have also given Alpha or Ultrabac at dry off with other vaccines. We need to split these up so we may end up moving some vaccines back into the last few weeks of lactation.

The second point is to understand that bactrim, like pasteurilla vaccines may block the immunity given by viral fractions unless the viral fraction has been previously given. This may even be true for intranasal vaccines. Examples of changes we can advocate for many include no longer giving Inforce3 in one nostril and once PMH IN in the other at birth. Give the Inforce 3 at birth, but delay the Once PMH IN for 4 to 7 days. We also do not want Vista Once or Bovishield OneShot to be the first viral vaccine that calves see. If they have had Bovishield before, the combination vaccine is fine.

Drs. Attend Zoetis Quality Milk & Genomics Drs. Hardesty and King were able to attend this update in Celina. More info to come. We also met our new tech service vet, Dr. Flavio Silvestro.

Spring is Here! Curtains Open? Fans and Sprinklers Ready?

Drs. Attend Merck Banamine Transdermal Launch Five of our doctors were able to attend the launch of Banamine Transdermal. This "Pour On" Banamine is labeled for topical use in beef and dairy cattle. Not for use in beef bulls intended for breeding, dairy bulls, female dairy cattle 20 months or older, including dry dairy cows, and suckling beef calves dairy calves, and veal calves. Indications are for the control of fever associated with bovine respiratory disease and the control of pain associated with foot rot in steers, beef heifers, beef cows, beef bulls intended for slaughter, and dairy replacement heifers under 20 months of age.

It will be used extra label for pain control associated with dehorning calves. Dose is 3 cc poured down the back one time.

Dr. Michalak serves at AASV Dr. Mitch served as chair of the AASV Food Safety committee. She also attended the rest of the San Diego meeting of swine veterinarians.

Dr. Hardesty serves on AABP Board The board of AABP makes decisions that affect the cattle business and veterinary practice worldwide. Dr. Hardesty is starting his three year term as director on the board.

Drs. Lefeld & Stayduhar attend Practice Management Seminar These doctors attended the second year of seminars put on by the AABP Practice Sustainability Committee. This year focuses on becoming part of practice ownership

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Fly Control Every Fly you kill in April means 10,000 less flies in September. It's time to make your control plan for this summer.

Hoof Trimming Travis Busman's presentation at last month's Cargill meeting was one of the best hoof trimming talks we've seen. A summary is: Lameness has become too normal. Major contributors are Cow Comfort, Footbath management, and Hoof trimming. Areas to focus on include free stall design, time budget including forced standing that inhibits 11 to 14 hours of lying, flooring, heat abatement, cattle handling, and stocking rates. If cows have more than 2 ½ hours of holding pen time gate to gate, horn lesions increase.

Slippery floors create white line lesions because of the separation of that junction as cows slide. Rough floors increase horn wear resulting in toe ulcers. Travis advocates grooves that are 3 ¾ inches on center, ¾" wide and ½" wide.

Heat stress changes behavior. A cow producing 40 pounds of milk generates 3200 BTU's while a cow giving 120# generates 6400 BTU's. When internal body temperature increases one degree, cows stand up. This decreases circulation to the feet. Circulation is needed to keep the claw healthy.

Cattle handling is a learned skill and is not intuitive. It may be worth investing in training because a case of lameness is a \$404 loss.

Foot baths are our tool against microbial lesions of hairy warts and foot rot. The factors affecting efficacy of footbaths include 1) design which is important to get 3 to 4 dunks of each foot. We make baths 12 feet long, 22 inches wide at the

bottom with solid sides that are 32 to 36 inches wide at 36 inches high. 2) location, 3) efficacy of the product, but we always come back to copper or formaldehyde 4) Correct product concentration at less than 2% solution. More than 2-4 quarts in 50 gallons resulting in >2% formaldehyde turns early hairy wart lesions into chronic lesions 5) Consistent usage, which depends on dirtiness and chronic lesions. If this is good, two times a week is enough.

Hoof trimming done right reduces lameness, done poorly it creates it. White line is rare on the front feet, as are toe and sole ulcers. 90% of lesions are caused mechanically on the outside claws of the hind feet. The chorium is the blood supply inside the hoof that produces the horn capsule. Standing creates inflammation in the chorium.

Evaluation of hoof trimming involves asking the question are we achieving functional trimming or hoof reduction. Common errors are:

1. Over trimming length and sole thickness. These will be lame in 3 to 7 days. The chorium is only 1/8 inch from the coffin bone, P3. Any rimming of the toe triangle reduces protection resulting in toe ulcers and P3 recedes with permanent reduction.
2. Excessive trimming to inside claw of hind foot. This establishes the foot angle. If this claw is all white, it is over trimmed.
3. Removal of Axial or inside wall. This takes away the supporting edge. So, never trim between the toes, it stimulates additional hook.
4. Excessive removal of the abaxial or outside wall. We need 3 inches of axial length for a 1600# Holstein
5. Trimming sole with extreme concavity.
6. Incorrect modeling. Doing this right requires a knife.

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