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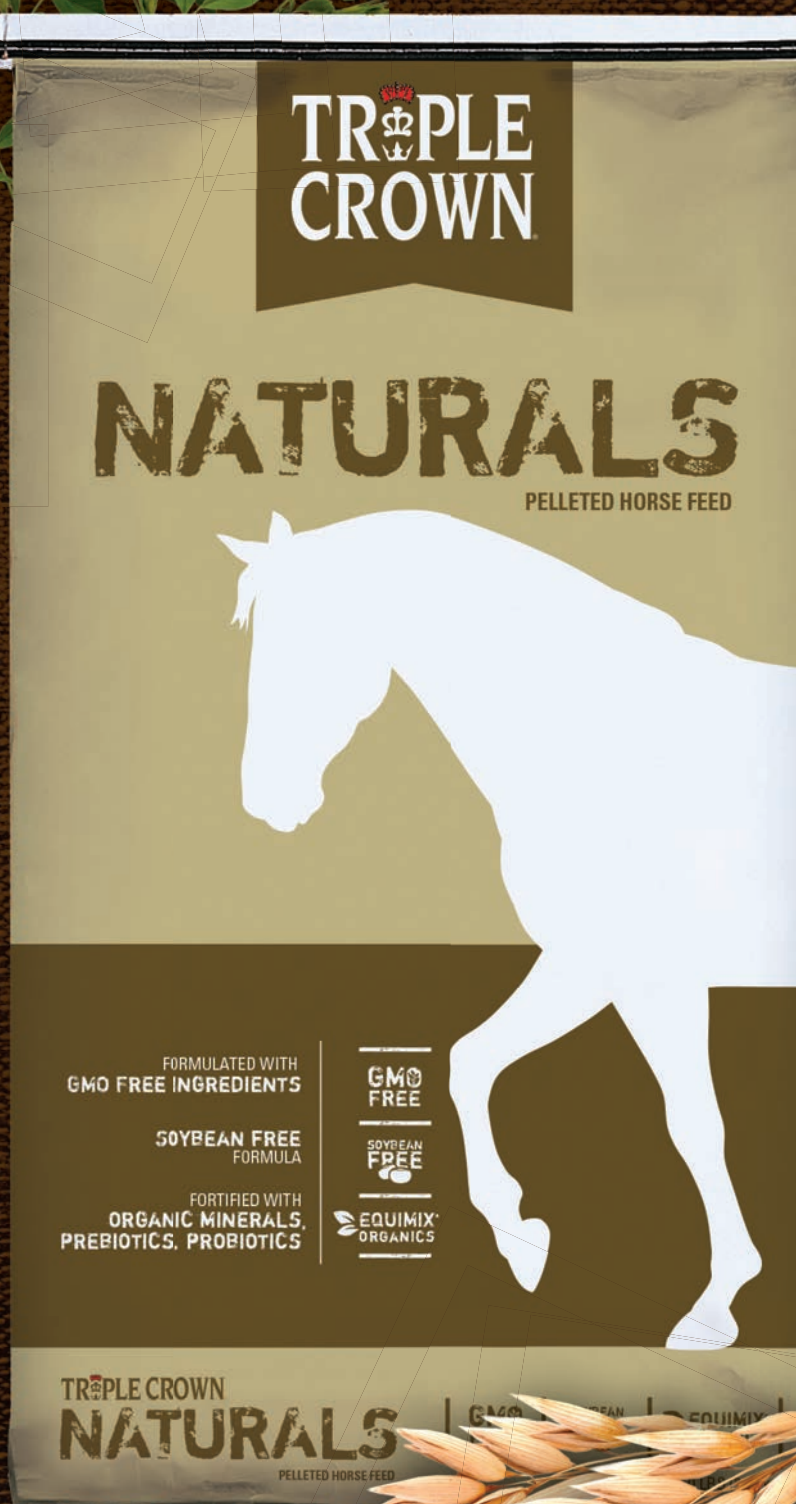
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Cover Photo: Negotiation and communication play an intricate role in a veterinarian's practice success.

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2Q, Renew!

By the time you receive this issue of *EquiManagement*, your equine business will be halfway through the second quarter of your business year. YIKES! Have you gotten a quarter of your New Year's resolutions or your 2017 business goals accomplished or at least partially achieved? How were your financials for the first quarter of the year?

It's good to set some notes on your calendar to do a business check once each fiscal quarter. That might be something as simple as making an appointment with your CPA, your business manager or your spouse—whomever is keeping your books. If everyone knows that each quarter, you are going to stop and take a look at where you are financially, that can encourage you and your staff to become more "immediate" in your financial thinking.

If you say, "Well, we look at financials each month," good for you! But keeping a finger on the pulse isn't like diving into where you are profitable, where you aren't—and why.

As you plan the second half of your year, you should take time to make sure that you are setting yourself up for success. That might mean buying a piece of equipment or adding a new service. Or it might mean postponing a purchase, because the first part of the year didn't go as you planned.

The good thing about the second



quarter of your business year is that you still have half of the year to either catch up, change plans or do more of what you're doing so well!

Resorting to Education

IDEXX and Merial sponsored the January 2017 AAEP Resort Symposium in the Grand Caymans. There

was a crowd of 100 or more equine veterinarians and guests who enjoyed not only the quality seminar content, but the lovely location.

Merial is bringing you coverage of the 2017 AAEP Resort Symposium (*see p. 12*), which focused on sporthorse lameness. There was much more covered at the Resort Symposium than could be included in the pages of this magazine, but we hope you enjoy this content.

Maybe you can join your colleagues at the 2018 AAEP Resort Symposium in Maui, Hawaii. That also might be a great reward for you or a staff member after a productive and profitable 2017.

Facelift

EquiManagement.com has had a facelift! Make sure and visit our website, as well as our Facebook page, to stay up to date with new stories and news items from across the industry.

We are posting stories online that don't appear in the magazine—such as Keeping Up medical/business stories and other news. And make sure to sign up for our monthly e-newsletter. **EM**



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Two veterinary technicians/assistants will win an all-expense-paid trip to the 2017 AA EVT Annual Conference during the AAEP convention in San Antonio, Texas, be featured in the winter issue of *EquiManagement*, and their nominators will win \$1,000 for their clinic.

Simply fill out the form online by **July 14, 2017** to nominate a veterinary technician/ assistant who exemplifies:

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Income-Driven Student Loan

There is no stigma in entering a loan repayment plan, but know what you are getting into.

I recently heard two disturbing statements about student loans. The first was from a student who stated that she did not know how much her loans were. The second statement came from a clinician who told us to expect to pay the full amount of our loans, because the government plans to help us pay them back aren't reliable.

The massive tuition costs that this generation takes on are unsustainable without help. The average student loan debt in 2015 topped \$160,000. With an average interest rate of 5.8%, the monthly loan payment under the standard repayment plan was \$1,760.30. Most vet students do an internship after school, with salaries averaging \$26,500. So during their internship years, equine students pay 80% of their gross salaries in standard loan repayments. And that's before taxes. It quickly becomes obvious why it is important for vet students and new graduates to understand income-driven repayment plans.

It is difficult to find information about these plans. The plans outlined below are a reference for anyone who is beginning to explore repayment options. For more information visit studentaid.gov.

Public Service Loan Forgiveness

If you have 120 qualifying payments while employed by a government or public institution, it qualifies you for forgiveness of the remaining loan

amount. This plan can be combined with any of the income-based repayment plans below. This lowers the monthly "qualifying payment" amount. Note that there is potential in the legislature that would cap the amount forgiven.

Income-Based Repayment

The IBR plan makes your monthly payments 10-15% of your discretionary income (any amount over 150% of the poverty line for your household size). Any remaining loan amount after 20 or 25 years is forgiven. It is important to remember that the amount that is forgiven gets counted as income for that year, and you pay taxes accordingly.

Pay As You Earn

PAYE is a new plan that keeps payments at a fixed 10% of your discretionary income, with forgiveness occurring in

20 years. You have to be a new borrower (undergraduate or graduate) after October 1, 2007, in order to qualify. With this plan, every year you recertify your income. Your payments will never exceed what you would pay monthly in the standard repayment plan. This is a slower form of paying off the loan, leaving more remaining when the forgiveness period is reached.

Revised Pay As You Earn

REPAYE differs from PAYE in two aspects. The first is that loan forgiveness for this plan occurs at 25 years instead of 20. Second, this plan is 10% of your discretionary income, but its payments might exceed the payments of a standard plan. This pays your loans off faster as your income grows, leaving a smaller amount to be forgiven at 25 years.

Take-Home Message

These plans are just a starting point. They only work for Federal Direct Loans, as privately held loans and some other types of loans do not qualify. You should research what works best for you. No matter what you decide, remember that there is no stigma in an income-driven repayment plan. **EM**

Zach Loppnow is a senior veterinary student at the University of Minnesota. He was the national VBMA vice president for 2016 and is an active member of the Minnesota SCAAEP.



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Lameness management is a key issue for equine practitioners, and it was an important topic of discussion at the 2016 American Association of Equine Practitioners (AAEP) Convention.

Resveratrol Supplementation for Hock Lameness

Hock lameness is often addressed with intra-articular therapy, systemic joint therapy (Adequan, Legend) and/or oral supplementation. At the 2016 AAEP Convention, Ashlee Watts, DVM, PhD, DACVS, described the use of resveratrol for managing pain of the hocks.

Resveratrol, obtained from red grape skins, is a disease-modifying drug that targets inflammatory pathways.



Resveratrol is obtained from red grape skins.

The double-blinded study looked at 45 horses, aged 10-12 years, diagnosed with tarsal osteoarthritis via anesthesia in the lower hock joints. All were treated with triamcinolone injections in the distal and middle intertarsal joints. The horses were then sent home to their owners, with half receiving further supplementation with resveratrol (RV) and the other half receiving only a placebo. Phone interviews of the owners/riders were conducted two months later, and the horses returned to the researchers for objective evaluation at four months.

At two months, 95% of the RV-treated horses were reported by their riders to be better after the hock injection and supplement, compared to 70% of those receiving oral placebo. In a previous study, 90% of horses had experienced a recurrence of lameness 56 days after the hock intra-articular therapy.

At four months, approximately 24% of the RV group improved by one grade of lameness or more. Only 15% of the placebo group improved by one degree of lameness or more, and there was no difference in pelvic symmetry between groups. Based on rider opinion and the objective inertial sensor data, overall the RV-treated group improved compared to the placebo-treated group.

Treatment for Upward Fixation of the Patella

At the AAEP Convention's Kester News Hour, a paper (*Medial patellar ligament splitting in horses with upward fixation of the patella: A long-term follow-up*. *Equine Vet J* 2016;48:312-314) was discussed that suggests a treatment for horses with upward fixation of the patella that do not respond to conservative treatment.

The measurement of success is determined as no recurrence for three to 14 years. The technique splits the proximal third of the medial patellar ligament via ultrasound guidance. Rehabilitation involves hand walking for 15 minutes three times a day for two weeks, then gradually returning to normal activity.

Of 85 horses, surgery was performed under general anesthesia in 68%, with local anesthetic and sedation in 32%. Within two weeks, 97.6% of the patients had complete resolution of upward fixation. The other 2.4% persisted with the problem despite repetition of the procedure.

The researchers conclude that this is a highly effective procedure with a low complication rate that allows rapid return to function and activity.

Therapy for Tendon and Ligament Soft Tissue Injury

Andris Kaneps, DVM, PhD, DACVS, DACVSMR, addressed practical therapeutics for soft tissue injury before a large audience at the AAEP Convention.

He advocated immediate use of cold therapy to help minimize inflammation, pain and swelling. Optimal temperatures range from 59-66 degrees Fahrenheit (15-19 degrees Celsius). The gold standard uses ice water immersion that cools deep tissues by as much as 16 degrees Celsius. Usually a thermal plateau is reached within 10-13 minutes during a total therapy time of 20-30 minutes.

He recommended repeating this treatment three to four times per day in the initial 48 hours, then continuing cold therapy for two weeks for acute injuries.

Therapeutic ultrasound also provided pain relief and enhanced healing. This can be a useful adjunct to extracorporeal shock wave therapy by incorporating it for 10 minutes once or twice a day for the initial 10-14 days. Shock wave, administered every two to three weeks post-injury for three to five treatments, has the effect of decreasing inflammation, improving blood supply, increasing fibrinogen and collagen production, and increasing osteoblasts. Hand walking should be suspended for two days following shock wave treatment.

Regenerative techniques are useful 21-30 days following injury. Stem cells, platelet rich plasma or autologous conditioned serum can be extremely beneficial to provide growth factors involved in soft tissue healing processes.

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**Perspectives on equine digestive health,” by Helen Warren, PhD. Supplement to Equine Health magazine, May 2016.

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Kaneps noted that controlled exercise is the most effective means of rehabilitation because it aligns tendon fibers and allows for cross-linkage and correct orientation of collagen. This reduces the likelihood of scar development and restrictive adhesions. He suggested beginning hand walking soon after an injury, with gradual increases in exercise. Ultrasound exams every 60-90 days facilitates decision-making of how fast to progress. Typically it is safe to increase exercise levels 5-10% each week, as long as lameness and ultrasound images of the damaged area are monitored every eight to 10 weeks, he said. With this protocol, success is achieved in 67-71% of patients, whereas pasture turnout is successful in only 25-51%.

His objective is to get the horses into three-times-daily hand walking as soon as possible. When hand walking reaches 30 minutes per session, the horse is checked for lameness grade and given an ultrasound exam. This is usually at three to four months post-injury. If all seems good, the horse can be started under saddle at the walk for 20-25 minutes. After three to four weeks of mounted walking, trotting can be added following 10-15 minutes of walking warm-up.

Lameness and ultrasound exams are used to evaluate healing, and if all is well, the next stage includes adding three minutes of cantering, with slowly added progressive exercise demands as the horse's injury improves.

Warmbloods with PSSM

A genetic mutation (GYS1) is the predominant cause of Type 1 polysaccharide storage myopathy (PSSM) in draft and Quarter Horse-related horses, leading to increased concentrations of muscle glycogen and subsequent exertional rhabdomyolysis (ER). This mutation is found in only 6.3% of warmbloods, compared to a 35% incidence in non-warmblood breeds.



Research found that 52% of warmbloods develop Type 2 PSSM.

At the 2016 AAEP Convention, Savannah Lewis, DVM, PhD, reported on the University of Minnesota study on Type 2 PSSM. Evaluation of 3,602 muscle biopsies revealed that 52% of warmbloods and 46% of other light breeds, including some Quarter Horses, develop Type 2 PSSM. While both Type 1 and Type 2 syndromes are treated similarly, Type 2 PSSM has more elusive signs.

The horses tend to be older (8 years, give or take). Yet only 26% of warmbloods demonstrated ER that led to muscle biopsy. Instead, 66% had an abnormal gait, the most consistent feature. Lameness was often poorly localized and could not be blocked with regional anesthesia. Muscle glycogen concentrations were not significantly different than those in normal horses.

The cause and etiology of PSSM Type 2 is unknown. This research shows that an abnormal gait that is non-responsive to nerve blocks might be additionally evaluated using muscle biopsy.

Take-Home Message

Sometimes the smallest details discovered in research and case studies can improve lameness diagnosis and treatment. Staying current on those topics is one means of finding answers to puzzling lameness cases and of achieving higher client satisfaction in your diagnostic skills and therapeutic approach. **EM**

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A wide-angle photograph of a tropical beach. The foreground shows the wet, sandy shore with gentle waves lapping at it. Several people are walking along the water's edge. In the background, there are lush green trees and a resort building with a red roof. The sky is clear and blue.

This is the famous
Seven Mile Beach on
Grand Cayman Island,
where the 2017 AAEP
Resort Symposium
was held.

Sporthorse Focus

The 2017 AAEP Resort Symposium focused on
many aspects of sporthorse practice.

Story and photos by Kimberly S. Brown

The 2016 demographics of the AAEP membership showed that nearly 30% of members' primary type of practice was performance (which excluded racehorses). Performance horse practice was second only slightly to pleasure/farm practice in terms of the number of members involved.

The 2017 AAEP Resort Symposium's in-depth focus was on sporthorse practice, with three speakers covering multiple topics of interest to veterinarians who deal with performance horses and their owners. While it would be impossible to relay all the information provided in the Resort Symposium sessions, we have included coverage from selected presentations and summaries from all presentations.

The Resort Symposium was sponsored by IDEXX and Merial, with Merial providing sponsorship to bring you this information in *EquiManagement*. This year's program was put together by AAEP board member Tracy Turner, DVM, MS, DACVS, DACVSMR, owner of Turner Equine Sports Medicine and Surgery in Minnesota.

Neurologic, Lameness or Both?

This topic is one many veterinarians have trouble with; much of the time, their problem centers around trying to convince owners of the correct way to diagnostically proceed when the owners think their horses are lame.

Presenter Amy L. Johnson, DVM, DACVIM (in large ani-

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²Kawcak CE, Frisbie DD, Trotter GW, et al. Effects of intravenous administration of sodium hyaluronate on carpal joints in exercising horses after arthroscopic surgery and osteochondral fragmentation. *Am J Vet Res*. 1997;58(10):1132-1140.

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mal internal medicine and neurology), is an assistant professor of large animal medicine and neurology at the University of Pennsylvania's New Bolton Center. Each speaker at the AAEP Resort Symposium was asked to create a take-home message for each topic, and for this presentation, Johnson provided the following statement: "Horses fail to meet performance expectations for many reasons, with lameness being one of the most common. Neurologic disease can mimic or be mistaken for an orthopedic problem, and some horses might have both problems. Careful clinical examination and appropriate diagnostic testing and interpretation are the keys to accurate diagnosis."

Veterinarians need to help owners understand that using a systematic diagnostic approach to cases where neurologic problems could be present is time-intensive, but in the long run, it will "reduce costs to the owner and improve diagnostic accuracy," said Johnson.

Having a good history on the horse can help with the differentiation between a neurologic issue and lameness. This includes knowing the duration and extent of the problem, whether the horse is getting better or worse, whether NSAIDs change the problem, whether there is tripping, falling or exacerbation of clinical signs with a specific movement, etc.

She stressed that the starting point should always be the clinical examination, *not* serologic testing for Lyme or equine protozoal myeloencephalitis (EPM). "Running serologic tests for Lyme and EPM does not help you decide if the horse is neurologic or lame," she stressed. "Just because a lab test is positive or negative should not affect your clinical evaluation."

Johnson said that she prefers to start with a neurologic exam rather than a lameness exam. She reminded veteri-

narians that "most causes of neurologic disease do not cause pain, with the notable exception of some forms of cervical vertebral stenotic myelopathy (CVSM) or other vertebral arthropathies, such as spondylosis or changes of the articular process joints in the vertebral column."

In general, Johnson said, an equine neurologic exam can be divided into four parts: 1) evaluation of mental status; 2) cranial nerve (CN) exam; 3) evaluation of posture, spinal reflexes and muscle while the horse is standing; and 4) evaluation of gait, posture and postural reflexes while the horse is moving.

She said that the first three can be observed in the horse while it is in a stall, or they can be done with the horse in hand. The goal is to determine whether the horse is normal or abnormal, and to localize the lesion.

Johnson described her typical in-hand exam as follows:

- Walk in a straight line.
- Trot in a straight line (looking more for lameness with this).
- Walk in a serpentine.
- Walk with the head elevated.
- Walk while pulling the tail.
- Walk in small circles in both directions. Johnson said she usually does this herself to spin the horse in both directions, in addition to using a handler, so that she can feel any changes in the horse's willingness or ability to spin in each direction.
- Walk backward.
- Walk over uneven terrain—hills, curbs, etc., with the head neutral and elevated. (Johnson noted that you can see some changes in gait on hills with horses having cervical problems.)

Johnson said that the following characteristics of the horse's gait might be observed at any point during the exam. These observations can help veterinarians diagnose neurologic disease or

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More than 100 practitioners gathered at the AAEP Resort Symposium for a program created by Dr. Tracy Turner on sporthorse medicine.

localize neurologic signs to a particular neuroanatomic region:

- long-strided, floating—suggests upper motor neuron (UMN)/general proprioceptive (GP) weakness and ataxia
- short-strided, choppy—suggests lower motor neuron (LMN) weakness or musculoskeletal problem
- rate rhythm, regularity
- is the horse regularly irregular, or irregularly irregular?
- look for proprioceptive deficits/buckling, abnormal limb movement or placement, crossing/interference, pivoting, circumduction

Johnson then offered some notes from her experiences in doing neurologic and lameness exams:

- When walking a horse with its head in the air, you often see the horse drift away from the handler—but be careful to note whether the horse drifts to the same side, even when handler switches sides.
- When doing a tail pull, make sure to note whether it is even side-to-side and how the horse recovers. Remember that calm horses let you pull them to the side.
- Circling is good for diagnosing neurologic problems. Johnson said that if she could only use one diagnostic movement test, she would pick circling. She added that you need to make sure

to note whether the horse has limbs that are pivoting or swinging out too widely. “You need a little forward momentum when circling, or you can make a normal horse look ataxic,” said Johnson.

- The back-up should look like a trot in reverse, and the horse should not drag its feet. This is an important test for drafts or warmbloods when you are trying to detect shivers.
- When you are walking a horse downhill with its head held up, neurologic horses often “look for the ground” with their front limbs.

“If an abnormal gait is recognized but its origin is not clear, the next step is often diagnostic local or regional analgesia to see if the abnormal gait will ‘block out,’ in which case musculoskeletal disease is assumed,” said Johnson. “If the abnormal gait is not considered ‘blockable,’ involves multiple limbs or there are other reasons not to perform diagnostic analgesia, a systemic analgesia trial with phenylbutazone or a similar non-steroidal anti-inflammatory drug might yield useful information. Repeated neurologic and lameness examinations are important, particularly after analgesia trials. In most cases, the appropriate diagnostic path will be identified at this point.”

Johnson reminded the veterinarians

in attendance that a horse might have lameness *and* mild neurologic disease. “Sometimes it is easier to get rid of lameness to see how much that is contributing to the problem,” she said.

“I realize there are horses with mild neurologic disease that are doing their current jobs well,” she continued. “Hunters, jumpers and dressage horses can do their jobs up to a certain point with low-level neurologic deficits. Then, if they develop lameness, it might be because of a new physical problem rather than the longstanding, low-level neurologic problem. That horse might have been that way neurologically for years.”

EPM: One Disease, Many Symptoms

Johnson was again the presenter on this topic, and her take-home message was as follows: “Equine protozoal myeloencephalitis (EPM) is the most commonly diagnosed infectious neurologic disease of horses in the United States. However, widespread equine exposure to the causative organisms leads to over-diagnosis and unwarranted treatment. Application of appropriate diagnostic criteria and the most accurate tests will permit accurate diagnosis. Several treatment options are available for affected horses.”

Johnson posed this question to the audience at the AAEP Resort Symposium: Why are there so many EPM and Lyme disease talks? She said it was because we have widespread seroprevalence with occasional disease; multiple testing options; several treatment options; and limited consensus on diagnosis and treatment.

“When these protozoa invade the central nervous system, they can affect any part, causing highly variable clinical signs that might manifest insidiously or suddenly and subsequently progress slowly or rapidly. General proprioceptive ataxia is one of the most common clinical signs of disease and is often

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asymmetric, with a mixture of upper and lower motor neuron paresis. Due to lower motor neuron involvement, muscle atrophy (again, often asymmetric) is also common.”

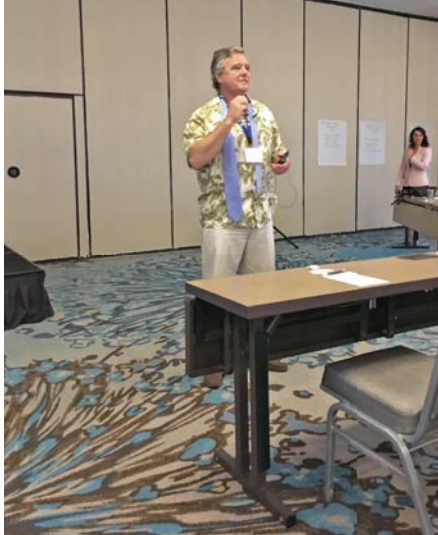
She also reminded the audience that a diagnosis of EPM is always presumptive without post-mortem examination. The diagnosis is based on three principles: compatible clinical signs with the disease; exclusion of other diseases; and proof of exposure. In addition, she said that if the horse gets better on phenylbutazone, then it's not EPM.

Johnson discussed the commonly used laboratory tests, which all are based on antibodies, just not the same ones; “different tests, different antibodies,” she noted.

She also said that exposure in the absence of CNS infection confounds test interpretation, and that blood contamination of CSF samples can affect results. She reminded the audience that there is natural diffusion of antibodies from the blood that can also be problematic in diagnosing EPM.

She said that general principles for interpretation of EPM test results are as follows:

- A positive serum test indicates exposure to the organism but does not confirm CNS infection, *regardless of the magnitude of the titer*. Low positive serum titers are commonly seen in horses that *do have EPM*, while high positive serum titers are commonly seen in horses that *do not have EPM*.
- A negative serum test usually indicates that the horse has not been exposed to the organism. Rarely, a recently infected horse might show clinical signs prior to seroconversion, in which case repeated testing in 10-14 days should yield a positive result. A positive CSF test is more likely to correlate with an EPM diagnosis than a positive serum test. However, false positives commonly occur due to blood contamination



Facilitator Dr. Monty McInturff said the AAEP Resort Symposium was a ‘no-tie’ affair, and dressed the part.

(particularly with WB, less so with IFAT and ELISA) or normal diffusion of antibodies from blood to CSF. Horses with low CSF titers are less likely to have EPM than horses with high CSF titers, but CSF titers are best interpreted in light of serum titers.

- A negative CSF test usually means EPM is not the cause of disease. Rarely, as mentioned above, a recently infected horse will show clinical signs prior to developing a measurable antibody level in CSF; retesting 10-14 days later should yield a positive result.
- The *best way* to diagnose active EPM is to submit serum *and* CSF for quantitative testing and calculation of a serum:CSF titer ratio (or specific antibody index, or C-value), which allows detection of intrathecal antibody production. The serum:CSF titer ratio is calculated by dividing the reciprocal of the serum titer by the reciprocal of the CSF titer. Laboratories that utilize this method have test-specific validated cutoff values and report the calculated ratio; ratios below the cutoff value are indicative of intrathecal antibody production, and ratios above the cutoff value are not.

Interpretation of Serology

“I only run tests on horses that I think have neurologic disease,” stated John-

son, who gave the following notes on interpretation of results.

- Positive = exposure, but does not confirm CNS infection.
 - ▷ Remember: The magnitude of titer doesn't matter!
- Negative = no exposure, and CNS infection is highly unlikely.
 - ▷ Exception = recent infection
 - ▷ If you get a negative result, the repeat testing in 10-14 days if you have a high suspicion of EPM.

Johnson said, “I've previously lost ground on some of these very acute cases when I think they are EPM and they test negative.” She said she has learned to begin treatment and re-test.

Regarding whether veterinarians should perform follow-up serology on horses undergoing EPM treatment, Johnson said, “In my honest opinion, follow-up titers usually are not helpful. Their blood titers and response to treatment have not gone hand-in-hand. I haven't been able to link those two.”

To reinforce that the magnitude of the serum titer does not necessarily correlate with disease state, she said that she has seen horses with the very low 1:250 blood titer for EPM on the SnSAG 2, 4/3 ELISA die of EPM, and she said she's seen wobblers with high titers of 1:8,000 that were not affected with EPM.

Johnson noted that the updated ACVIM EPM consensus statement for the most accurate diagnosis of EPM is as follows:

- neurologic exam
- exclusion alternative differentials
- immunodiagnostic testing of serum and CSF
 - ▷ intrathecal antibody production
 - ▷ using SAG2, 4/3 ELISA; NhSAG Elisa serum:CSF titer ratios

To Run Tests or Not?

If the horse is neurologic, Johnson said that she almost always runs the serum

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PRECAUTIONS

Prior to treatment, a complete neurologic exam should be completed by a veterinarian. In most instances, ataxia due to EPM is asymmetrical and affects the hind limbs. Clinicians should recognize that clearance of the parasite by ponazuril may not completely resolve the clinical signs attributed to the natural progression of the disease.

The prognosis for animals treated for EPM may be dependent upon the severity of disease and the duration of the infection prior to treatment. The safe use of MARQUIS (ponazuril) in horses used for breeding purposes, during pregnancy, or in lactating mares, has not been evaluated. The safety of MARQUIS (ponazuril) with concomitant therapies in horses has not been evaluated.

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In the field study, eight animals were noted to have unusual daily observations. Two horses exhibited blisters on the nose and mouth, three animals showed skin reactions for up to 18 days, one animal had loose stools, one had a mild colic on one day and one animal had a seizure while on medication. The association of these reactions to treatment was not established.

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plus CSF. If it is a normal horse, there is no indication why testing should be done. On a pre-purchase exam with no neurologic indications, she doesn't run EPM testing. ("Would it be better to be positive or negative?") She does not recommend re-testing during or after treatment, as it is not predictive of treatment response or the potential for relapse.

Treatments

Johnson said she only has experience with the four products that have been approved by the FDA for treating EPM. She added that she almost always uses anti-inflammatories (steroids or NSAIDs) because in post-mortem examinations, there are "tons of inflammatory cells as a host response to the protozoa." She feels that using anti-inflammatories helps reduce collateral damage to the nervous system.

"Sometimes I use two EPM drugs together in severe cases, because they target different pathways of the protozoa," noted Johnson. "Whether it makes a difference, I can't tell you; but it makes me feel better when horses are going rapidly downhill."

Johnson also noted that in her opinion, acute cases respond better than chronic ones. "I can reverse inflammation, but chronic ones that are puttering along for six to eight months and were not treated, then they have neural loss. And by the time you are working them up, they have lost neurons and they will not turn around, even if you get rid of the protozoal infection."

A veterinarian from the audience asked Johnson whether she used folic acid supplementation when treating horses for EPM, and she said she did not.

Another audience question was whether Johnson starts horses on treatment on day 1 of suspicion of EPM, and she said that she does. "If I suspect EPM and the horse has had clinical signs for less than two weeks, I keep on with

treatment for two to three weeks until a second negative test is received."

Another veterinarian asked about prophylactic treatment in areas with high exposure. Johnson said she doesn't know what to think about prophylactic treatment, but *if* a horse is in a high-exposure area and has a higher likelihood of exposure and stress, then it might make sense to do that.

"What makes me nervous is that some people think all young horses in high-exposure areas need to be on treatment—then that horse is moved to a situation where it is exposed and it has no immunity built up. Are they subsequently more likely to get disease than if they had been exposed as weanlings in a field and developed some natural immunity?" she asked.

Presentation Summaries From Other Speakers

There were many other exceptional presentations during the 2017 AAEP Resort Symposium, but with limited space to present those presentations, we will instead give you the presenters' summaries for each talk.

Lyme Disease and Neuroborreliosis: What Do We Know?

Johnson also gave this presentation, concluding that "infection with *Borrelia burgdorferi* is common, but rarely results in neuroborreliosis. Horses with neuroborreliosis have variable signs and laboratory results. Therefore, diagnosis is challenging and relies on fulfillment of several criteria plus exclusion of other possible diseases."

Headshaking: Where to Start?

On this topic, Johnson noted that headshaking "... is a self-explanatory syndrome, but diagnosis of the underlying etiology can be difficult, and clinical management can be even harder. Recent investigation has provided more information regarding

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Breaks during the 2017 AAEP Resort Symposium offered veterinarians a chance to step outside and enjoy the scenery and comraderie.

the underlying physiologic problem in many cases, and newly described treatment modalities (PENS treatments) can help improve horse comfort.”

Cervical Radiographs:

A Neurologist's Perspective

“Cervical vertebral problems are a relatively common cause of decreased performance in sporthorses,” Johnson concluded after this presentation. “Equine practitioners should be knowledgeable about proper acquisition and interpretation of cervical radiographs, so that they can advise clients appropriately.”

Radiography in a Digital Age

The presenter on this subject was Sarah M. Puchalski, DVM, DACVR, of Palm Beach Equine Clinic in Florida, who noted: “Digital imaging has greatly improved the radiographic capabilities of equine practitioners. The common use of digital radiographs also opens the doors for many opportunities and many pitfalls.” Her presentation covered commonly encountered problems with acquisition and interpretation, including digital artifacts, artifacts of positioning and factors leading to errors in interpretation.

Advanced Imaging of the Equine Athlete

In this presentation, Puchalski maintained that performance problems in the sporthorse “... take on many different presentations, ranging from unilateral

lameness to neurologic dysfunction. Making an accurate diagnosis is universally accepted as critical to appropriate treatment and rehabilitation, yet choosing which of the numerous available techniques remains confusing.” She provided a review of nuclear scintigraphy, MRI and CT, also introducing some novel techniques such as PET and robotic imaging. For those modalities she discussed indications, clinical rationale for appropriate use, logistics, practical applications and the costs of the readily available techniques. In addition, she provided numerous case examples to illustrate the use of each technique.

A New Look at Old Problems: Observations on Fetlock Subchondral Injury and Proximal Metacarpal/-tarsal Pain

“Advanced imaging techniques have provided greater insight into problematic anatomic sites,” Puchalski noted in this presentation. Her areas of focus were the fetlock, the proximal cannon bone region and novel lameness conditions.

Sporthorse Lameness

In this presentation, Turner noted that sporthorse lamenesses are no different than any other lamenesses, “... with the exception that they are probably more subtle. The rider, driver or trainer notices issues much sooner. In fact, these issues may be as simple as perceived loss of speed or [an]other performance factor.” Turner

said that the examination was critical and must be both systematic and thorough.

Gizmos and Gadgets:

Witchcraft or Wizardry?

“The horse industry likes gizmos and gadgets, and there are companies that make products to appeal to this interest,” Turner said in this presentation. He questioned whether there was evidence that any of these tools have an effect on horses, let alone a beneficial one.

Training and Rehabilitation

In this presentation, Turner advised that in order to be effective, a rehabilitation program “... should utilize specific veterinary and physiotherapy interventions to ensure pain-free range of movement is achievable.” He added that along with that pain-free range of motion, the veterinarian must strive to instill in the horse strength, balance and proprioception training using “clinically reasoned treatment protocols based upon evidence-based practice and a thorough knowledge of equine functional anatomy and biomechanics.”

Practical Equine Rehabilitation for the Practitioner

“Injections and surgery are the most common sports medicine techniques used by veterinarians,” Turner noted in this presentation. “However, veterinarians are learning that the difference between the success and failure of these treatments is aftercare.” He added that rehabilitation was based on healing, improving flexibility and physical conditioning, strengthening the injured tissue, then slowly returning to full activity. **EM**

Editor's note: The 2018 AAEP Resort Symposium will be held January 29-31 in Maui, Hawaii. Registration will be available through the AAEP in the fall of 2017.

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Equine veterinarians are expected to attend horses in emergency situations whether or not they have had specific training.

Equine Rescue and Disaster Response

Equine veterinarians are an important part of the group that can serve the community and save horses in need.

By Nancy S. Loving, DVM

There is no question that a professional veterinary education is comprehensive, preparing future practitioners for many situations. Yet not every possibility can be presented to students in a standard curriculum.

One disconnect that is rarely touched upon, except at a few universities, concerns the logistics for equine rescue and disaster response. It is not uncommon for equine veterinarians to encounter emergency situations for the first time with

the expectation by others that the veterinarian knows how to resolve crises. Without preparation, such an event can be daunting for even the most capable practitioner.

To remedy this kind of educational gap, an excellent program was organized by Colorado State University veterinary students from the Student Chapter of the American Association of Equine Practitioners (SCAAEP). They invited John Madigan, DVM, MS, DACVIM, and Jim Green to present at SCAAEP's annual weekend lecture and wet lab for interested

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veterinarians, veterinary students and first responders.

Madigan is world-renowned for his advances in equine rescue operations and is the founder of the UC Davis Veterinary Equine Response Team (VERT). Green hails from the United Kingdom and is an animal rescue specialist of the Hampshire Fire and Rescue Service, as well as serving as director of the British Animal Rescue and Trauma Care Association (BARTA). He said that he and his team manage at least one large animal rescue operation each week. Currently Green and Madigan are working together at UC Davis with a focus on emergency preparedness and the integration of vets and first responders.

The kinds of equine incidents requiring rescue are as numerous as one's imagination. They include trailer accidents; horses falling into ravines, holes, wells or through ice; horses stuck in bogs or cattle guards; loose animals; downed or recumbent horses; and fires and floods that make evacuations and triage necessary.

"While these situations may not occur with great frequency, they are associated with high risk and danger to personnel working to extract a horse," said Madigan.

Because of that, it is important for veterinarians to work together as a cohesive unit with first responders and other agencies. An equine veterinarian's role encompasses a number of important functions, ranging from tactical planning, chemical restraint and pain control to triage, casualty management and the potential necessity of euthanasia. He noted that these tasks are an expansion of services and functions that most equine practitioners perform daily.

As Green pointed out, "Surveys have shown that 83% of people say they will risk their lives for their animals." With that in mind, it is likely that a lay person will intervene and put himself/herself in harm's way before professional help arrives at the scene. When animals are in

distress, Madigan said, "People behave irrationally. A veterinarian's skills help keep responders and horse owners safe, while also improving the viability of the casualty animal."

The Incident Command System

Both of the experienced rescue experts emphasized that it is critical to work within an incident command structure (ICS) when faced with a rescue or emergency response situation. ICS is an operational protocol that revolves around a hierarchy of people, tiered with different functions and positions, all controlled by a team leader with recognized authority.

Firefighters and other first responders already have this structure in place; these agencies commonly respond to calls for help. Communication with all members of the rescue group is key to an effective operation. A veterinarian arriving on the scene should check in with the incident commander (IC) first. Just as there are designated tasks, specific jobs and positions within a surgical operating room, the same concept applies to working with a rescue and emergency response team.

Safety is the top priority. Besides working under the direction of an incident commander, Madigan urged veterinarians to use personal protection equipment (PPE) such as helmets and safety vests. Not only is this practical, but showing up to the site already garbed in PPE enables quick integration into the response team—first responders then have more confidence that the veterinarian is knowledgeable about what could happen at the scene.

Madigan explained that having the veterinarian work within an incident command system reduces the obligations of the veterinarian, so that he or she is empowered to be most effective at carrying out the critical role of medical doctor. Green remarked, "In these stressful

situations, there is a need for compassion without emotion." First responders and veterinarians are good at this.

Madigan advised that veterinarians not take on more responsibilities during an operation than they can cope with. They should also be prepared to be flexible, he said, stressing that they should "... take a pause to increase observation of the patient, and to get an overview of what needs to be done before diving in to act. Get some history on the situation, step back and assess, and then reassess."

First and foremost is the need to stabilize the horse. This might mean taking time to administer IV fluids (20 ml/kg), and once the horse's heart rate slows and mucous membranes look okay, then it can be moved. Moving the horse before it is stabilized could result in significant compromise to its survival.

Evacuation Principles

Equine veterinarians can also be effective liaisons with barn managers/owners and horse owners, teaching them about evacuation plans and logistics in advance of an event such as a fire or flood. (Two helpful UC Davis resources can be found at vetmed.ucdavis.edu. Search for Equine Emergency Preparedness poster and search for Horse Report Fall 2014.)

Madigan said that there are two choices regarding evacuation:

1. Evacuate early, which is the preferred method. "Even if a shelter location is not yet identified, get the horses out of harm's way," he said.

2. Shelter in place by removing the horses from structures and providing them with long-term feed and water. Madigan urged that the horses be locked up or tied; otherwise, they will return to their known "safe haven," which might be threatened or already on fire or flooded. In addition, loose horses are a hazard to people, traffic and themselves. Horses shouldn't be allowed to run free unless there is an immediate danger to health and life. In those



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cases, personnel should be notified that horses are loose. Ideally, horses can be freed with a halter in place to facilitate catching them later.

Effective evacuation relies on the experience of knowledgeable teams. If horse trailers aren't available or are unable to access the area, then Madigan's advice is to lead or ride the horses out.

Another important point discussed is that some states have "fence-out" regulations, meaning that property owners are required to fence animals (not owned by them) out of their property. The result is that only first responders are allowed to open gates and cut fences in the event of a crisis, whereas well-meaning residents and volunteers are not.

Local first responders at the seminar said that the Disaster Animal Response Team that is led by the Larimer County Humane Society in Fort Collins,

Colorado, works in conjunction with the Larimer County Horse Association. They conduct frequent training sessions, such as having volunteers and first responders practice loading horses into unfamiliar trailers. These sessions establish a relationship with the incident commander.

There is always a concern about compensation for the financial costs of treating injured animals at veterinary hospitals, particularly when there is no identification that connects a horse with its owner. It might be necessary to fund-raise in order to provide payment for injured animals treated by a veterinary practitioner.

Recumbent Horses

When faced with a "down"/recumbent horse that cannot rise, Madigan stressed that only those people who are optimistic about getting the horse back on its

feet should be encouraged to stay and help. Those kinds of situations need positive approaches that seek every possible means of aiding the horse.

He also noted the importance of debriefing sessions that welcome communication from everyone invested in the operation. This provides an opportunity to discuss what could be done differently and allows everyone to have a say, which might help with the decision-making process.

Another important point mentioned is related to infectious disease possibilities. When examining a recumbent horse, it is a good idea to look for signs of rabies or equine herpesvirus type 1 infection. Equine herpesvirus myelitis (EHM) can present as an acute neurologic onset, with an owner noting that the horse seemed okay other than a recent history of fever and nasal discharge before suddenly collapsing. An EHM horse might have clinical signs of vasculitis—such as injected gums or limb edema—and/or there might be evidence of urinary incontinence or bladder overflow. Before a horse is moved into a veterinary hospital or a barn housing other horses, infectious and zoonotic disease possibilities need to be considered and biosecurity measures implemented.

Once a trapped or recumbent horse is assessed, then equipment can be used to sling, lift and move it. Two devices are available to help with this process: a large-animal lift and the Anderson Sling support device. This equipment can be used to helicopter a horse to a safe place for further observation and treatment. It can also help support a horse that has difficulty standing for weeks or months.

Emergency Response Educational Opportunities

Advanced training in large animal rescue operations is available through many sources. Some examples are listed below, in no particular order:

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ucdavis.edu/ceh/disaster_preparedness/training_courses.cfm

- British Animal Rescue and Trauma Care Association: bartacic.org
- Emergency Equine Response Unit: eerular.org
- Code 3 Associates, in association with Colorado State University: code3associates.org
- Technical Large Animal Emergency Rescue: tlaer.org
- US Rider Equestrian Motor Plan: usrider.org
- Missouri Emergency Response Services: mersteam.org
- Large Animal Rescue Company based in California: largeanimalrescue.com
- J Woods Livestock Services in Canada: www.livestockhandling.net
- Large Animal Emergency Rescue Network, with worldwide resources: laern.org
- Animal Rescue Training in California: animalrescuetraining.com
- Washington State Animal Response Team: washingtontart.org

Other rescue training can be found on saveyourhorse.com/wholearn.htm. In addition, the following courses are available with a small animal or human focus:

- HASTPSC in Virginia, oriented toward small animals and equipment: hastpsc.com
- Ready Vet Emergency Response Plans, oriented mostly toward small animal: readyvet.co
- Rescue Tech International, geared to human rescue: rescuetechninternational.com

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Whether you are negotiating to purchase a car or discussing your next job, use these tips to understand the process and get what you want.

A photograph showing a close-up of two hands shaking in a firm grip over a white document. The document has the word "Contract" printed on it. To the left of the document are several keys, and to the right is a red pen. The background is a wooden surface.

Negotiate Like a Pro

Learn about your negotiation style, and use it—or other styles—to your advantage during bargaining.

By Amy L. Grice, VMD, MBA

Just the word “negotiation” makes most people cringe. When most veterinarians think about negotiation, they think of bargaining with a salesman over the price of a new digital radiology unit or dickering with a car salesman over the price of a new vehicle.

The truth is that negotiations take place continually in life: between business owners and employees, vets and horse owners, parents and children. Any time a decision requires input from more than one person, negotiation is involved.

One can define negotiation as the process by which two

or more parties attempt to resolve their differing interests. Some things are common to all negotiations, whether they are between warring countries or between a parent and child: Negotiation occurs between two or more parties that have a conflict of needs, desires or interests that need resolution. The parties negotiate by choice, voluntarily, because they feel they can gain a better outcome than by simply accepting what the opposing party is offering. The parties prefer to negotiate rather than fight or sever a relationship. They prefer to bargain rather than have one of them dominate and the



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Trimethoprim is 2,4-diamino-5-(3,4,5-trimethoxybenzyl) pyrimidine.

ACTIONS: Microbiology: Trimethoprim blocks bacterial production of tetrahydrofolic acid from dihydrofolic acid by binding to and reversibly inhibiting the enzyme dihydrofolate reductase.

Sulfadiazine, in common with other sulfonamides, inhibits bacterial synthesis of dihydrofolic acid by competing with para-aminobenzoic acid.

Trimethoprim/sulfadiazine thus imposes a sequential double blockade on bacterial metabolism. This deprives bacteria of nucleic acids and proteins essential for survival and multiplication, and produces a high level of antibacterial activity which is usually bactericidal.

Although both sulfadiazine and trimethoprim are antifolate, neither affects the folate metabolism of animals. The reasons are: animals do not synthesize folic acid and cannot, therefore, be directly affected by sulfadiazine; and although animals must reduce their dietary folic acid to tetrahydrofolic acid, trimethoprim does not affect this reduction because its affinity for dihydrofolate reductase of mammals is significantly less than for the corresponding bacterial enzyme.

Trimethoprim/sulfadiazine is active against a wide spectrum of bacterial pathogens, both gram-negative and gram-positive. The following *in vitro* data are available, but their clinical significance is unknown. In general, species of the following genera are sensitive to trimethoprim/sulfadiazine:

Very Sensitive

Escherichia
Streptococcus
Proteus
Salmonella
Pasteurella
Shigella
Haemophilus

Sensitive

Staphylococcus
Neisseria
Klebsiella
Fusiformis
Corynebacterium
Clostridium
Bordetella

Moderately Sensitive

Moraxella
Nocardia
Brucella

Not Sensitive

Mycobacterium
Leptospira
Pseudomonas
Erysipelothrix

INDICATIONS AND USAGE: Trimethoprim/sulfadiazine is indicated in horses where potent systemic antibacterial action against sensitive organisms is required. Trimethoprim/sulfadiazine is indicated where control of bacterial infections is required during treatment of:

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Wound Infections and Abscesses

Trimethoprim/sulfadiazine is well tolerated by foals.

CONTRAINDICATIONS: Trimethoprim/sulfadiazine should not be used in horses showing marked liver parenchymal damage, blood dyscrasias, or in those with history of sulfonamide sensitivity.

ADVERSE REACTIONS: During clinical trials, one case of anorexia and one case of loose feces following treatment with the drug were reported.

Individual animal hypersensitivity may result in local or generalized reactions, sometimes fatal. Anaphylactoid reactions, although rare, may also occur. **Antidote:** Epinephrine.

Post Approval Experience: Horses have developed diarrhea during trimethoprim/sulfadiazine treatment, which could be fatal. If fecal consistency changes during trimethoprim/sulfadiazine therapy, discontinue treatment immediately and contact your veterinarian.

PRECAUTION: Water should be readily available to horses receiving sulfonamide therapy.

ANIMAL SAFETY: Toxicity is low. The acute toxicity (LD₅₀) of trimethoprim/sulfadiazine is more than 5 g/kg orally in rats and mice. No significant changes were recorded in rats given doses of 600 mg/kg per day for 90 days.

Horses treated intravenously with trimethoprim/sulfadiazine 48% injection have tolerated up to five times the recommended daily dose for 7 days or on the recommended daily dose for 21 consecutive days without clinical effects or histopathological changes.

Lengthening of clotting time was seen in some of the horses on high or prolonged dosing in one of two trials. The effect, which may have been related to a resolving infection, was not seen in a second similar trial.

Slight to moderate reductions in hematopoietic activity following high, prolonged dosage in several species have been recorded. This is usually reversible by folic acid (leucovorin) administration or by stopping the drug. During long-term treatment of horses, periodic platelet counts and white and red blood cell counts are advisable.

TERATOLOGY: The effect of trimethoprim/sulfadiazine on pregnancy has not been determined. Studies to date show there is no detrimental effect on stallion spermatogenesis with or following the recommended dose of trimethoprim/sulfadiazine.

DOSAGE AND ADMINISTRATION: The recommended dose is 3.75 g UNIPRIM Powder per 110 lbs (50 kg) body weight per day. Administer UNIPRIM Powder orally once a day in a small amount of palatable feed.

Dose Instructions: One 37.5 g packet is sufficient to treat 1100 lbs (500 kg) of body weight. For the 1125 g packets and 12 kg boxes, a level, loose-filled, 67 cc scoop contains 37.5 g, sufficient to treat 1100 lbs (500 kg) of body weight. For the 200 g, 400 g, and 1200g jars, and 2000 g pail, two level, loose-filled, 32 cc scoops contain 37.5 g, sufficient to treat 1100 lbs (500 kg) of body weight. Since product may settle, gentle agitation during scooping is recommended.

The usual course of treatment is a single, daily dose for 5 to 7 days.

Continue acute infection therapy for 2 or 3 days after clinical signs have subsided.

STORAGE: Store at or below 25°C (77°F)

HOW SUPPLIED: UNIPRIM Powder is available in 37.5 g packets, 1125 g packets, 200 g jars, 400 g jars, 1200 g jars, 2000 g pails and 12 kg boxes. Apple Flavored UNIPRIM Powder is available in 37.5 g packets, 1125 g packets, 200 g jars, 400 g jars, 1200 g jars and 2000 g pails.

CAUTION: Federal (USA) law restricts this drug to use by or on the order of a licensed veterinarian.

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other one capitulate. They prefer to try to figure out their conflict themselves rather than take their dispute to a higher authority for resolution.

One essential fact about negotiations is that in order to be successful, both parties must move from their opening positions in order to reach an agreement. In addition, good negotiators manage intangibles as well as tangibles. This means that besides money and goods, all parties' emotions, pride, reputations and relationships are considered. These factors can be remarkably important in preserving relationships for the future.

A critical concept for all negotiators is BATNA, or "best alternative to negotiated agreement." Understanding the best alternatives if a negotiation fails is important, because negotiators who have considered their options have much more power to walk away from a deal that is not attractive. Knowing the best alternative to an agreement before entering into a negotiation is critical to making good decisions. Because of their awareness of their true "bottom line," negotiators with a firm understanding of their BATNA have power and confidence, and are generally more successful in achieving their goals.

Types of Negotiation

Some negotiations are zero-sum or *distributive*, while others are mutual-gain or *integrative*. Distributive bargaining is a competition over who will get more of a limited resource. This type of bargaining occurs when the goals of one party are in direct conflict with the goals of the other. Integrative negotiation is a collaborative, cooperative activity that aims to allow the needs of all parties to be met.

Distributive Negotiation

Because distributive bargaining generally focuses on haggling about a price and is competitive, both parties' interests are in direct conflict. There is a fixed re-

source (often money), and both parties are seeking to maximize their gain.

Because these negotiations result in a winner and a loser, using distributive tactics should be reserved for situations where either a single, simple deal is being made and a future relationship with the other party is not important, or an integrative negotiation has progressed to the point of each side "claiming value." ("Claiming value" is the actual divvying up of the resource over which the negotiation centers. Who gets the biggest piece of the pie? Or who gets pie and who gets cake?) A vet purchasing a used truck from a car salesman should use distributive bargaining techniques.

In distributive bargaining, each party has a goal regarding the optimal point at which negotiations will conclude. This is called the target point. Each party also has a resistance point, beyond which he or she will break off negotiations and walk away.

The opening offer will serve as an anchor for the negotiation. The anchor point is very important, because all negotiation will take place around this initial stake in the ground. If opening offers (whether from seller or buyer) are too far from the target point, it is possible that no negotiation will occur. For instance, if the used truck salesman states that the truck's price is \$35,000 but the target point of the prospective buyer is \$15,000, it is quite unlikely that

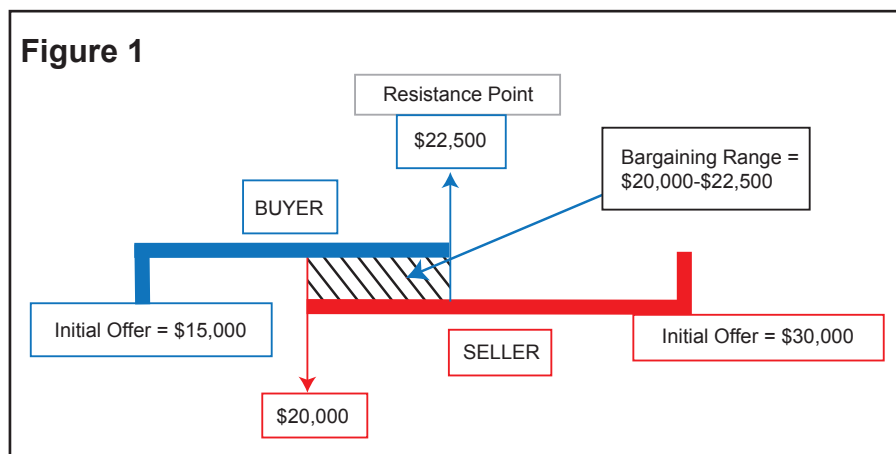
a negotiation will occur; the buyer will assume he or she can't afford the vehicle.

The spread between the buyer's and seller's resistance points is known as the bargaining range, because any offer outside of this range will be immediately rejected by the other party. If the salesman's lowest acceptable price (his resistance point) for the used truck is \$20,000, he will dismiss an offer of \$15,000. Through the process of making offers and counter-offers, each party begins to reveal his or her resistance point.

Consider a seller with an opening price of \$30,000, a target of \$25,000 and a resistance point of \$20,000 bargaining with a buyer with a target of \$17,500 and a resistance point of \$22,500. One can see that the bargaining range is between \$20,000 and \$22,500 (see Figure 1). Within a few minutes of conversation, each party will understand the other's position better, and a deal might be made that satisfies both.


A positive bargaining range occurs when the buyer's resistance point is above the seller's, so there is room for a mutually agreeable price to be reached. In the case of a negative bargaining range, the seller has a minimum price that is higher than the maximum that the buyer is willing to pay. In this case, the negotiation will end, the parties will re-think their resistance points, or the buyer will pursue an alternative.

The concept of BATNA is very im-



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portant in distributive negotiation. If the vet has identified another used truck at another dealership with an asking price of \$22,500 (that party's BATNA), he or she will be much more likely to press the salesman for a sale price on the subject truck that is closer to his or her target, and less likely to agree to a price

close to his or her resistance point.

The basic strategies in distributive bargaining are to push for a price very close to the seller's resistance point by making extreme offers and small concessions, and/or to convince the seller to reconsider his or her resistance point by influencing that party's beliefs about the value of

what he or she is selling. For instance, if you are buying a used truck, and it has a small dent, you might say, "Too bad the truck has this dent. Did you notice that?"

During negotiations, it is best if you can get the other party to make the opening offer, because then you will have some idea of what that person's bargaining range is. Because concessions are essential, if you must make the opening offer, make sure it is sufficiently distant from your resistance point to allow room for an exchange of offers.

Research shows that parties are more satisfied with agreements if there is a series of concessions rather than if the first offer is accepted. If there is no bargaining, often people feel as though they could get a better price elsewhere, and they might walk away. When making concessions, one can determine when a counterpart's resistance point is being reached as successive concessions become smaller.

We all know people who approach all discussions as though they were bargaining sessions, and they generally are not people who are enjoyable to be around. By reserving this approach for situations that are truly one-time transactional agreements with no relationship components, you will have the most rewarding results.

Integrative Negotiation

In integrative negotiation, the goals of the negotiating parties are not mutually exclusive—this is win-win bargaining. In this negotiation, there is a focus on what is found in common rather than on differences; on meeting the needs of all parties; and on an enlargement of the pie through innovative ideas. To be a successful integrative negotiator, one must build trust through integrity; have a positive outlook that sees abundance rather than scarcity; recognize that others' interests have equal value to yours; be able to see the big picture; and have strong listening skills.

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formation, both sides gain understanding of the needs and concerns of their counterparts, leading to less extreme resistance points. Identification of the others' true objectives and desired outcomes can lead to recognition of common ground and areas of alignment. This makes searching for solutions that meet both sides' goals more successful and satisfying. By generating multiple alternatives, innovative solutions can arise that increase overall value.

As an example, "Dr. Jane" is an associate who would like to pursue acupuncture training, but the required tuition and time away exceed her contractual continuing education budget and allotted days off. An active dialogue is needed between "Dr. Jane" and the owners of the practice that focuses on understanding the costs, benefits, goals and threats of this desire. By defining all the parameters of this "problem" collectively, both the associate's and the practice's needs and priorities can be accurately identified.

A collaborative approach that allows all concerns and aspirations to be voiced is most likely to produce an agreement that honors the needs of all parties.

One can imagine the associate's poor morale if the request was simply denied—or the practice owner's feelings of betrayal if the associate departed after the practice financed her training, and there was no repayment clause.

Both parties must think of what their BATNA is in this situation. The associate's BATNA might be to pay for the training herself and utilize vacation time in order to attend. The practice's BATNA could be to give the associate unpaid leave to attend the course, with her assuming all expenses in excess of her continuing education budget. When assessing these BATNAs, it is clear that a negotiated settlement is likely to be more satisfactory for all parties.

Steps for Integrative Negotiation

A sequence of steps for an integrative

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negotiation can be followed through collaboration:

1. What is the problem?
 - a. Depersonalize it.
 - b. State the problem as a specific goal to be attained.
 - c. Explore all possible aspects of the problem.
 - d. Explore all related issues.
 - e. What is most important? What is least important?
2. What obstacles must be overcome to achieve the goal?
3. What interests are present? Interests are underlying concerns, needs, desires and fears that motivate a negotiator to take a particular position.
 - a. Are they substantive (related to the focus of the negotiation)?
 - b. Are they process-oriented (related to how the negotiation unfolds)?
 - c. Are they relationship-based (related to value placed on relationships)?
 - d. Are they interests “in principle” (related to fairness or values)?
4. Explore why they want what they want.
5. What criteria will be used to judge proposed solutions? Parties need to agree on criteria before generating solutions.
6. What are possible solutions to solve the problem?
 - a. Generate multiple alternatives.
 - b. Avoid judging or evaluating solutions while brainstorming.
 - c. Avoid ownership of solutions.
 - d. Ask outsiders.
 - e. Attempt to expand the pie, creating additional value.
7. Evaluate solutions on the basis of the criteria previously determined.
 - a. Narrow choices by rank ordering.
 - b. Judge solutions by how good they are and how they will be accepted by those implementing them.

- c. Consider combining options into packages that please multiple interests.
 - d. Try to reach consensus rather than voting; this will help create full commitment by all parties for the implementation of a negotiated settlement.
8. Formalize the agreement in writing.

Negotiation Styles

Different individuals have innately preferred negotiating styles. These include inclinations toward accommodation, compromise, competition or collaboration. By understanding one's own preferences and being aware of the potential for others to have differing styles, you can negotiate more effectively.

As you become more comfortable with experimenting with other negotiating styles, you will gain even more skill at bargaining. A cooperative approach is often more effective than a competitive one, and awareness of personal preferences can lead to better outcomes.

Simple assessment exercises are available that reveal preferred negotiating styles. Dr. G. Richard Snell, a professor at the Wharton School of Business, created an assessment tool for negotiation style that is printed as an appendix in his book “Bargaining for Advantage.” Results of this assessment can reveal a preferred style of negotiation. Gender and culture also play a part in negotiating styles.

Accommodation

Those with a strong accommodation style have strong skills in relationship building and enjoy helping solve others' problems. They can excel in many customer service roles and integrative bargaining situations, but they can be vulnerable to competitive counterparts.

They might sometimes place more value on relationships than is warranted by the situation. Those with weak accommodation skills often focus on

being “right” and have difficulty seeing other perspectives. Others might see them as stubborn and unreasonable or uncaring about others' feelings.

Compromise

Negotiators who are predisposed to compromise are eager to find an agreement that will close the negotiation. Seen as friendly and reasonable, compromisers often grasp the first fair solution that presents itself and are vulnerable to choices made without adequate fact-finding.

Those low on compromise abilities often have strong principles and passion, but are subject to standing on principle when common sense dictates otherwise; they can be seen as stubborn.

Avoidance

People that favor avoidance dislike confrontation and will dodge all situations that lead to disagreement. This can manifest as diplomacy and tact, and can be very helpful in tense negotiations. Conflict avoidance, if well handled, can bring difficult groups to agreement.

However, important information is often not brought into the open due to a fear of difficult conversations. Those who have low avoidance preferences have a high tolerance for assertive or even aggressive conversation. They are often seen as lacking tact or being overly confrontational. However, they can be valuable in some bargaining situations.

Competition

Negotiators who prefer competition like to win, and they enjoy negotiating because it provides a contest. Although highly skilled in the processes of negotiation, their style is dominating and can damage relationships.

Because it's difficult to assign value to intangibles, they often focus on the tangible aspects of bargaining, leaving value on the table. Those who have low

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CAUTION: Federal law restricts this drug to use by or on the order of licensed veterinarian.

* Freedom of Information Summary, Original New Animal Drug Application, NADA 141-427, for OSPPOS. April 28, 2014.

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INDICATION: For the control of clinical signs associated with navicular syndrome in horses.

CONTRAINDICATIONS: Horses with hypersensitivity to clodronate disodium should not receive OSPPOS.

WARNINGS: Do not use in horses intended for human consumption.

HUMAN WARNINGS: Not for human use. Keep this and all drugs out of the reach of children. Consult a physician in case of accidental human exposure.

PRECAUTIONS: As a class, bisphosphonates may be associated with gastrointestinal and renal toxicity. Sensitivity to drug associated adverse reactions varies with the individual patient. Renal and gastrointestinal adverse reactions may be associated with plasma concentrations of the drug. Bisphosphonates are excreted by the kidney; therefore, conditions causing renal impairment may increase plasma bisphosphonate concentrations resulting in an increased risk for adverse reactions. Concurrent administration of other potentially nephrotoxic drugs should be approached with caution and renal function should be monitored. Use of bisphosphonates in patients with conditions or diseases affecting renal function is not recommended. Administration of bisphosphonates has been associated with abdominal pain (colic), discomfort, and agitation in horses. Clinical signs usually occur shortly after drug administration and may be associated with alterations in intestinal motility. In horses treated with OSPPOS these clinical signs usually began within 2 hours of treatment. Horses should be monitored for at least 2 hours following administration of OSPPOS.

Bisphosphonates affect plasma concentrations of some minerals and electrolytes such as calcium, magnesium and potassium, immediately post-treatment, with effects lasting up to several hours. Caution should be used when administering bisphosphonates to horses with conditions affecting mineral or electrolyte homeostasis (e.g. hyperkalemic periodic paralysis, hypocalcemia, etc.).

The safe use of OSPPOS has not been evaluated in horses less than 4 years of age. The effect of bisphosphonates on the skeleton of growing horses has not been studied; however, bisphosphonates inhibit osteoclast activity which impacts bone turnover and may affect bone growth.

Bisphosphonates should not be used in pregnant or lactating mares, or mares intended for breeding. The safe use of OSPPOS has not been evaluated in breeding horses or pregnant or lactating mares. Bisphosphonates are incorporated into the bone matrix, from where they are gradually released over periods of months to years. The extent of bisphosphonate incorporation into adult bone, and hence, the amount available for release back into the systemic circulation, is directly related to the total dose and duration of bisphosphonate use. Bisphosphonates have been shown to cause fetal developmental abnormalities in laboratory animals. The uptake of bisphosphonates into fetal bone may be greater than into maternal bone creating a possible risk for skeletal or other abnormalities in the fetus. Many drugs, including bisphosphonates, may be excreted in milk and may be absorbed by nursing animals.

Increased bone fragility has been observed in animals treated with bisphosphonates at high doses or for long periods of time. Bisphosphonates inhibit bone resorption and decrease bone turnover which may lead to an inability to repair micro damage within the bone. In humans, atypical femur fractures have been reported in patients on long term bisphosphonate therapy; however, a causal relationship has not been established.

ADVERSE REACTIONS: The most common adverse reactions reported in the field study were clinical signs of discomfort or nervousness, colic and/or pawing. Other signs reported were lip licking, yawning, head shaking, injection site swelling, and hives/pruritus.

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competitive tendencies value fairness and trust, but because they are seen as non-threatening, they will be at a disadvantage in some situations.

Collaboration

Those who are prone to collaboration enjoy solving tough problems through negotiation and work hard to find a best solution. When negotiations reach “claiming-value” stages (who gets cake and who gets pie), these people might fail to gain their share of the resources due to their wish to build consensus, and they are vulnerable to competitive negotiators.

Those low in collaborative instincts prefer a more controlled, detail-oriented process and might lose clarity and focus in the seeming chaos of a group setting.

Strategies for Negotiations

Although people have preferred styles, becoming comfortable with recognizing, working with and practicing other styles is important, as your counterparts in negotiation might have a different preferred style. Depending on the bargaining situation in which you find yourself, your style might help you be more successful, or it could be a source of weakness. Self-awareness can help you mitigate the negative effects and capitalize on the positive.

Strategies for negotiations can be chosen from a model that balances the importance of future relationships with a perceived degree of conflict. Used along with self-awareness of your preferred negotiating style (see below), one can confidently take an approach to resolving differences using recommended strategies. You can use the following chart to determine the best strategy.

You will notice that the strategies listed mirror the styles discussed earlier. In the broader categories of cooperative and competitive strategies, both have strengths and weaknesses and can be effective in different circumstances.

		Degree of Conflict	
Importance of Future Relationship	High	High I. Balanced (Business Partnership, Joint Venture, Committee)	Low II. Relationships (Marriage, Friendships, Work Team)
		Best strategies: Collaboration Compromise	Best strategies: Accommodation Collaboration Compromise
	Low	III. Transactions (Market Transaction, Practice Sale, House Sale, Divorce)	IV. Tacit Conflict Avoidance Through Cooperation (Roadway Intersection, Airplane Seating)
		Best strategies: Competition Collaboration Compromise	Best strategies: Avoidance Accommodation Compromise

However, multiple studies have shown that the most successful negotiators—even in professional settings such as union negotiations—are cooperative rather than competitive. This is reflected in the preference for cooperative strategies in the rubric above.

Take-Home Message

All successful negotiations require careful preparation, including determination of the best alternative to a negotiated agreement (BATNA), the target point, the resistance point and the opening offer.

Integrative bargaining requires additional steps. Negotiators must carefully define the problem, identify both parties’

needs and interests, then collaboratively generate alternative solutions. After careful deliberation of the value created by the choices generated, negotiators must then select a solution collaboratively that maximizes the outcome for all.

Negotiation is unavoidable, and it takes place regularly during the ordinary events of our work and personal lives. Understanding the difference between distributive and integrative negotiations, knowing our preferred negotiation styles, being familiar with the process of an effective negotiation, and understanding the best strategies for different situations all can contribute to negotiation with more satisfying outcomes. **EM**



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Nonverbal communication accounts for 80-93% of all communication.

Speaking Volumes

Boost your nonverbal communication skills to improve your relationship with clients.

By Lisa Munniksma

“Understanding and managing nonverbal communication is critical in learning how to effectively partner with your team and clients,” said Wendy Hauser, DVM, owner of Peak Veterinary Consulting. This statement carries weight in the communications training that Hauser does with veterinarians since, as she pointed out, “nonverbal communication comprises 80-93% of all communication.”

Positive nonverbal communication cues include your smile, confident eye contact, appropriate head nods and laughter, body position and genuine facial expressions—all of which convey empathy, emotional support and reassurance

to clients. These are cues your clients look for in an authority figure and which help you build a good relationship with them. Multiple studies conducted by Jane Shaw, DVM, PhD, and others indicate that veterinarians who improve their communication skills see improved client adherence, more positive client feedback and more career satisfaction.

Make or Break

“Imagine a veterinary health care team member making a preventive care recommendation in which he doesn’t believe, but he is following practice ‘policy.’ The team member might not make eye contact, might use a tone of voice that conveys that he doesn’t agree and might have closed body language,

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such as crossed arms. Despite the spoken recommendation, the client will believe the nonverbal message rather than what is said by the team member,” Hauser said.

In short, said Shaw, who leads the communication curriculum and FRANK communication workshops at the Colorado State University Veterinary Teaching Hospital, nonverbal communication can make or break the message you’re delivering. “It’s how we express the authenticity of our message,” she explained. “Nonverbal communication can be your saving grace when your words are not as articulate as you’d like. You can mess up your word choice, but they still get your message through the nonverbal.”

If your face flushes or your eyes well up with tears, you can’t prevent these normal, human reactions. Clients might appreciate this aspect of your humanity when it is connected genuinely to your message. However, as Shaw pointed out, “When your nonverbal messages are not connected with your verbal messages, the client can see you’re sending a mixed message.”

If you were in your client’s position in the example above—being given a message in which the speaker clearly doesn’t believe—your confidence in your veterinarian might not be high, and your follow-through might not be strong.

You Can Improve

“Veterinarians should match their nonverbal cues to the gravity of the situation,” Hauser said. “It would not be appropriate to deliver a poor prognosis with an upbeat tone of voice and a huge smile. By using emotional intelligence, which is the awareness and management of your own emotions as well as recognizing the emotions of others, nonverbal behavior can be appropriately matched to the needs of the client.”

Simply paying attention to the matter of nonverbal communication and making yourself aware of the importance

Studies Show...

These examinations of communication improvement in companion animal veterinary practice show increased client adherence and satisfaction, as well as improved doctor satisfaction:

- “Outcomes assessment of on-site communication skills education in a companion animal practice,” Jane R. Shaw, DVM, PhD; Gwyn E. Barley, PhD; Kirsti Broadfoot, PhD; Ashley E. Hill, DVM, MPVM, PhD; Debra L. Roter, DrPH; *J Am Vet Med Assoc*, Vol 249, No. 4, August 15, 2016
- “Veterinarian satisfaction with companion animal visits,” Jane R. Shaw, DVM, PhD; Cindy L. Adams, MSW, PhD; Brenda N. Bonnett, DVM, PhD; Susan Larson, MS; Debra L. Roter, DrPH; *J Am Vet Med Assoc*, Vol 240, No. 7, April 1, 2012
- “Effect of veterinarian-client-patient interactions on client adherence to dentistry and surgery recommendations in companion-animal practice,” Noureen Kanji, BSc, MSc; Jason B. Coe, DVM, PhD; Cindy L. Adams, MSW, PhD; Jane R. Shaw, DVM, PhD; *J Am Vet Med Assoc*, Vol 240, No. 4, February 15, 2012
- “Analysis of solicitation of client concerns in companion animal practice,” Laura M. A. Dysart, BSc; Jason B. Coe, DVM, PhD; Cindy L. Adams, MSW, PhD; *J Am Vet Med Assoc*, Vol 238, No. 12, June 15, 2011
- “Impact of the owner-pet and client-veterinarian bond on the care that pets receive,” Todd W. Lue, MBA, PRC; Debbie P. Pantenburg, BS; Phillip M. Crawford, MS; *J Am Vet Med Assoc*, Vol 232, No. 4, February 15, 2008

of these small, usually unintentional, cues can improve your nonverbal skills. Take your—and your team’s—nonverbal communication skills to another level with this advice:

React to client cues. Failing to read your client is a missed opportunity, Hauser noted. It’s your chance to drive home your message.

Shaw pointed out that equine veterinarians are skilled at recognizing their patients’ nonverbal communication cues—a horse’s pricked ears, the whites of its eyes or an aggressive stance—and you can learn to pick up on those of your clients, as well. She illustrated this idea with one situation that you probably see every day: “Clients say ‘I understand,’ but then they break eye contact and maybe appear nervous.” This is your client’s way of not wanting to admit that he or she doesn’t actually understand. If you can learn to pick up on and react to those cues—in this

case, offer further explanation—you can improve not only communication with your client, but also client adherence and patient-care success.”

Another common nonverbal cue from clients is apparent in continual cell phone use. “In such a situation, I would ask the client if everything was OK, since they were checking their phone so much,” Hauser said.

Mirror clients’ emotions. The concept of mirroring emotions isn’t to say you should panic when your client is panicking, but you shouldn’t be smiling and laughing, either. On the other hand, if your client is smiling and laughing—in an appropriate situation—by mirroring that person’s enthusiasm, you can help to build a stronger bond between you.

“In emotionally charged situations, taking the time to pause and breathe can be helpful in understanding the client’s needs and in defusing the situation,” Hauser said.

Maintain an open posture. Interacting with clients in a farm setting is more casual than interacting in an office setting, but it's just as important to pay attention to your body language.

Of course you already know that crossing your arms produces an unwelcome vibe, but you might stand with arms crossed anyway, simply out of habit. (Don't do that!) Likewise, having your hands in your pockets might be a comfortable way to stand and talk, but, as Shaw pointed out, it looks like you're not confident. Try hooking just a few fingers in a pocket or belt loop instead, or occupy your otherwise dangling hand by holding something else, like a clipboard or a lead rope.

If you are standing with your client, looking at him or her head-on with squared shoulders can appear confrontational. Shaw suggested softening your stance and appearing less domineering by taking a step away with one foot to open up the angle between you.

If your client is sitting—on a tack trunk, for example—Shaw suggested pulling up a hay bale or finding another way to comfortably be on his or her level for your conversation.

Be respectful. As your true intentions are liable to show via nonverbal communication, your frame of mind and your attitude toward your client are ever-important, before you even meet with him or her.

"Some very doctor-centered nonverbal cues that are destructive to the doctor-client relationship include paternalistic behaviors, such as forceful tones of voice and finger shaking," Hauser said.

These are behaviors to become mindful of and to correct immediately.

Be aware of fidgeting. "What are you doing with your hands?" Shaw asked. She said that many of the veterinarians and students she works with identify as being fidgety. Jungling pocket change

or clicking a pen are fidgets that can be subconscious to you, but distracting to your client. A fidget can send the message that you're nervous, distracted or in a hurry.

Understand cultural differences. You could appear to be intimidating or rushed if your client doesn't share similar communication styles. If you're from the New York City area and you move to Kentucky, you might find that you speak faster and louder than your clients. If you're from a family with Latin American roots, you could have more boisterous conversations than someone who from Idaho. Whether a cultural or an individual trait, "awareness of the tone, volume and pacing of the spoken word is one way that veterinarians can improve nonverbal behavior," Hauser said.

Observe interactions. "Are your nonverbal cues detracting from your verbal message?" asked Shaw. The best ways to find out are to videotape interactions with clients (with their permission); ask peers for observation and feedback; offer a client survey focusing on communication; and seek consultation. Hauser, Shaw and other consultants offer communication training.

Take-Home Message


All of these unspoken cues indicate your trustworthiness and empathy, which is important to clients. The next time you're tempted to rub your forehead, cross your arms or let out a fatigued sigh during a client conversation, consider the nonverbal cues you're sending, then adjust your message to communicate what you really mean. **EM**



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A close-up photograph of a man with short brown hair and a light beard, wearing a blue shirt. He is gently touching the face of a grey horse with his right hand. The horse has a white blaze on its face and is looking towards the camera. The background is a blurred outdoor setting with dry grass.

A wellness program rolls a bundle of services into one package, and those are services you are likely to be doing anyway for your clients' horses.

The Business of Wellness Programs

One practitioner walks you through his wellness plans and his reasons for creating them.

By Nancy S. Loving, DVM

Offering preventive health care for horses is often a major practice builder. Many practices provide these services piecemeal, doing what the client requests plus whatever else the practitioner recommends at the time of the spring and fall veterinary visits.

There is another strategy that provides added security, ensuring that clients follow through on their horses' health care while also providing a guarantee for ongoing practice revenue: wellness programs.

"The first step is for the veterinarian to decide why they want to implement a wellness program," said Ben Buchanan, DVM, DACVIM, DACVEEC, of the Brazos Valley Equine

Hospital in Navasota, Texas. This is important for ensuring that a consistent message is generated within the business that encourages staff and associates to help support the program. "If there is not a goal or a vision about why to implement these packages in the first place, then there could be confusion with staff telling different things to different clients," he added.

Buchanan has found that with a clear vision and message, his staff members "buy into" the idea of implementing wellness packages and are invested in the practice's mission to help horses and people.

Buchanan described multiple reasons why veterinarians might want to start wellness programs:

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¹ Data on file, Merck Animal Health

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Solution 0.22% (2.2 mg/mL)

CAUTION: Federal law restricts this drug to use by or on the order of a licensed veterinarian.

DESCRIPTION: Regu-Mate® (altrenogest) Solution 0.22% contains the active synthetic progestin, altrenogest. The chemical name is 17 α -allyl-17 β -hydroxyestra-4,9,11,13-tetra-3-one. The CAS Registry Number is 850-52-2. The chemical structure is:

Each mL of Regu-Mate® (altrenogest) Solution 0.22% contains 2.2 mg of altrenogest in an oil solution.

ACTIONS: Regu-Mate® (altrenogest) Solution 0.22% produces a progestational effect in mares.

INDICATIONS: Regu-Mate® (altrenogest) Solution 0.22% is indicated to suppress estrus in mares. Suppression of estrus allows for a predictable occurrence of estrus following drug withdrawal. This facilitates the attainment of regular cyclicity during the transition from winter anestrus to the physiological breeding season. Suppression of estrus will also facilitate management of prolonged estrus conditions. Suppression of estrus may be used to facilitate scheduled breeding during the physiological breeding season.

CONTRAINDICATIONS: Regu-Mate® (altrenogest) Solution 0.22% is contraindicated for use in mares having a previous or current history of uterine inflammation (i.e., acute, subacute, or chronic endometritis). Natural or synthetic gestagen therapy may exacerbate existing low-grade or "smoldering" uterine inflammation into a fulminating uterine infection in some instances.

PRECAUTIONS: Various synthetic progestins, including altrenogest, when administered to rats during the embryonic stage of pregnancy at doses manyfold greater than the recommended equine dose caused fetal anomalies, specifically masculinization of the female genitalia.

DOUSAGE AND ADMINISTRATION: While wearing protective gloves, remove shipping cap and seal; replace with antisealed plastic dispensing cap. Remove cover from bottle dispensing tip and connect luer lock syringe (without needle). Draw out appropriate volume of Regu-Mate solution. (Note: Do not remove syringe while bottle is inverted as spillage may result.) Detach syringe and administer solution orally at the rate of 1 mL per 110 lb body weight (0.044 mL/kg) once daily for 35 consecutive days. Administer solution directly on the base of the mare's tongue or on the mare's usual grain ration. Replace cover on bottle dispensing tip to prevent leakage. Excessive use of a syringe may cause the syringe to stick; therefore, replace syringe as necessary.

WHICH MARES WILL RESPOND TO REGU-MATE® (altrenogest) SOLUTION 0.22%? Extensive clinical trials have demonstrated that estrus will be suppressed in approximately 95% of the mares within three days; however, the post-treatment response depended on the level of ovarian activity when treatment was initiated. Estrus in mares exhibiting regular estrus cycles during the breeding season will be suppressed during treatment; these mares return to estrus four to five days following treatment and continue to cycle normally. Mares in winter anestrus with small follicles continued in anestrus and failed to exhibit normal estrus following withdrawal. Response in mares in the transition phase between winter anestrus and the summer breeding season depended on the degree of follicular development. Mares with inactive ovaries and small follicles failed to respond with normal cycles post-treatment, whereas a higher proportion of mares with ovarian follicles 20 mm or greater in diameter exhibited normal estrus cycles post-treatment. Regu-Mate® (altrenogest) Solution 0.22% was very effective for suppressing the prolonged estrus behavior frequently observed in mares during the transition period (February, March and April). In addition, a high proportion of these mares responded with regular estrus cycles post-treatment.

SPECIFIC USES FOR REGU-MATE® (altrenogest) SOLUTION 0.22%:

SUPPRESSION OF ESTRUS TO

- Facilitate attainment of regular cycles during the transition period from winter anestrus to the physiological breeding season. To facilitate attainment of regular cycles during the transition phase, mares should be examined to determine the degree of ovarian activity. Estrus in mares with active ovaries (no follicles greater than 20 mm in diameter) will be suppressed but these mares may not begin regular cycles following treatment. However, mares with active ovaries (follicles greater than 20 mm in diameter) frequently respond with regular post-treatment estrus cycles.
- Facilitate management of the mare exhibiting prolonged estrus during the transition period. Estrus will be suppressed in mares exhibiting prolonged behavioral estrus either early or late during the transition period. Again, the post-treatment response depends on the level of ovarian activity. The mares with greater ovarian activity initiate regular cycles and conceive sooner than the inactive mares. Mares with Regu-Mate® (altrenogest) Solution 0.22% may be administered early in the transition period to suppress estrus in mares with inactive ovaries to aid in the management of these mares or to mares late in the transition period with active ovaries to prepare and schedule the mare for breeding.
- Permit scheduled breeding of mares during the physiological breeding season. To permit scheduled breeding, mares which are regularly cycling or which have active ovarian function should be given Regu-Mate® (altrenogest) Solution 0.22% daily for 15 consecutive days beginning 20 days before the date of the planned estrus. Ovulation will occur 5 to 7 days following the onset of estrus as expected for non-treated mares. Breeding should follow usual procedures for mares in estrus. Mares may be regulated and scheduled either individually or in groups.

ADDITIONAL INFORMATION: A 3-year well controlled reproductive safety study was conducted in 27 pregnant mares, and compared with 24 untreated control mares. Treated mares received 2 mL Regu-Mate® (altrenogest) Solution 0.22% (2.2 mg/mL) daily for 35 consecutive days (2x dosage recommended for estrus suppression) from day 20 to day 325 of gestation. This study provided the following data:

- In filly offspring (all ages) of treated mares, vaginal size was increased.
- Filly offspring from treated mares had shorter interval from Feb. 1 to first ovulation than fillies from their untreated mare counterparts.
- There were no significant differences in reproductive performance between treated and untreated animals (mares & their respective offspring) measuring the following parameters:
 - Interval from Feb. 1 to first ovulation, in mares only.
 - mean interovulatory interval from first to second cycle and second to third cycle, mares only.
 - follicle size, mares only.
 - at 50 days gestation, pregnancy rate in treated mares was 81.8% (9/11) and untreated mares was 100% (4/4).
 - after 3 cycles, 14/12 treated mares were pregnant (91.7%) and 4/4 untreated mares were pregnant (100%).
 - colt offspring of treated and control mares reached puberty at approximately the same age (82 & 84 weeks respectively).
 - stallion offspring from treated and control mares showed no differences in seminal volume, spermatozoal concentration, spermatozoal motility, and total sperm per ejaculate.
 - stallion offspring from treated and control mares showed no difference in sexual behavior.
 - testicular characteristics (scrotal width, testis weight, perineal weight, epididymal weight and height, testicular height, width & length) were the same between stallion offspring of treated and control mares.

REFERENCES:

Shoemaker, C.F., E.L. Squires, and R.K. Shideler. 1989 Safety of Altrenogest in Pregnant Mares and on Health and Development of Offspring. Eq. Vet. Sci. 9(1): 2: 69-72.
Squires, E.L., R.K. Shideler, and A.O. McKinnon. 1989 Reproductive Performance of Offspring from Mares Administered Altrenogest During Gestation. Eq. Vet. Sci. 9(1): 2: 73-76.

WARNING: Do not use in horses intended for food.

HUMAN WARNINGS: Skin contact must be avoided as Regu-Mate® (altrenogest) Solution 0.22% is readily absorbed through broken skin. Protective gloves must be worn by all persons handling this product. **Pregnant women who suspect they are pregnant should not handle Regu-Mate® (altrenogest) Solution 0.22%. Women of child bearing age should exercise extreme caution when handling this product. Accidental absorption could lead to a disruption of the menstrual cycle or prolongation of pregnancy. Direct contact with the skin should therefore be avoided. Accidental spillage on the skin should be washed off immediately with soap and water.**

INFORMATION FOR HANDLERS:

WARNING: Regu-Mate® (altrenogest) Solution 0.22% is readily absorbed by the skin. Skin contact must be avoided; protective gloves must be worn when handling this product.

Effects of Overexposure: There has been no human use of this specific product. The information contained in this section is extrapolated from data available on other products of the same pharmacological class that have been used in humans. Effects anticipated are due to the progestational activity of altrenogest. Acute effects after a single exposure are possible; however, continued daily exposure has the potential for more upward effects such as disruption of the menstrual cycle, uterine or abdominal cramping, increased or decreased uterine bleeding, prolongation of pregnancy and headaches. The oil base may also cause complications if swallowed. In addition, the list of people who should not handle this product (see below) is based upon the known effects of progestins used in humans on a chronic basis.

PEOPLE WHO SHOULD NOT HANDLE THIS PRODUCT:

- Women who are or suspect they are pregnant.
- Anyone with thrombophlebitis or thromboembolic disorders or with a history of these events.
- Anyone with cerebral-vascular or coronary artery disease.
- Women with known or suspected carcinoma of the breast.
- People with known or suspected estrogen-dependent neoplasia.
- Women with undiagnosed vaginal bleeding.
- People with benign or malignant tumors which developed during the use of oral contraceptives or other estrogen-containing products.
- Anyone with liver dysfunction or disease.

ACCIDENTAL EXPOSURE: Altrenogest is readily absorbed from contact with the skin. In addition, this oil based product can penetrate porous gloves. Altrenogest should not penetrate intact rubber or impervious gloves; however, if there is leakage (i.e., pinhole, spillage, etc.), the contaminated area covered by such occlusive materials may have increased absorption. The following measures are recommended in case of accidental exposure.

Skin Exposure: Wash immediately with soap and water.

Eye Exposure: Immediately flush with plenty of water for 15 minutes. Get medical attention.

Swallowed: Do not induce vomiting. Regu-Mate® (altrenogest) Solution 0.22% contains oil. Call a physician. Vomiting should be supervised by a physician because of possible pulmonary damage via aspiration of the oil base. If possible, bring the container and labeling to the physician.

CAUTION: For oral use in horses only. Keep this and all medication out of the reach of children.

Store at or below 25°C (77°F).

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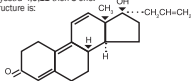
HOW SUPPLIED:

Regu-Mate® (altrenogest) Solution 0.22% (2.2 mg/mL). Each mL contains 2.2 mg altrenogest in an oil solution. Available in 1000 mL plastic bottles.

* US Patents 3,453,267; 3,478,067; 3,484,462

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• the desire to generate more work for the practice

• the desire to improve the bottom line on the vaccine and preventive care side of things

• the desire to make clients' jobs easier and more affordable by packaging wellness care into option plans. This strategy works well to provide care to the horses, also making it simple for their owners to access the care.

“The psychology of pricing is confusing,” noted Buchanan. “When we tried to make this a discounted package of services, it wasn't very popular. When we raised the price of the wellness package, three times as many people enrolled.”

However, if the wellness package is too expensive, “there is a point where no one will buy anything,” he cautioned.

Cost-conscious clients are likely to buy vaccines, etc., from feed and animal health supply stores—these folks aren't the ones to whom you are trying to sell the concept of a wellness package.

If his clients were to buy services “a la carte,” they'd end up paying the same, he explained. However, this program ensures several things that clients find appealing:

• The veterinarian's office sends reminders and helps to schedule the appointments, rather than waiting for the clients to remember to call.

• There is no ambulatory fee for any of the wellness package procedures, regardless of how many visits are made to the farm for the wellness work. An ambulatory fee is already factored into the package price.

• Included in wellness services are

▷ vaccinations twice a year, or as needed;

▷ deworming;

▷ a fecal exam once a year;

▷ physical exams twice a year;

▷ body condition scoring

evaluation;

▷ a Coggins test;

▷ an unlimited number of health certificates;

▷ microchipping;

▷ dentistry with sedation; and

▷ sheath cleaning.

For clients with Buchanan's wellness package, the emergency fee is waived for lacerations or colic, for example.

If an owner sets up an appointment for wellness services, then, “while you're here, doc,” asks for a pregnancy check, an estrous cycle check or a lameness exam, Buchanan explained that there would not be an ambulatory fee charged. However, there would be ancillary charges for services unrelated to the wellness package.

Since November is a less-busy month, he tries to push less time-sensitive work, such as dentistry and fecal testing, until then. This helps spread services throughout the year, rather than bunching them up around spring and fall.

The wellness package allows more time for talking with each client and answering questions. Additionally, he has started a program of shirt patches that enrolled clients can wear that designate them as part of an “exclusive” club; the visible patches also serve to promote his business.

If a horse dies part of the way through the year, then Buchanan compensates the owner with a pro-rated amount for the remaining time left on the wellness package. If a horse is sold, then that year's wellness package can be transferred to the new owner; however, there is no compensation for remaining time if the horse moves out of the area or the new owner doesn't wish to participate in the program.

Most of Buchanan's clients who sign on for the wellness program are one- to two-horse owners who don't stable their horses at big barns. Others are trainers. He said that the 30-40 horses currently enrolled in the standard yearly wellness package is a manageable number, and he'd be willing to take on more.

Looking at the statistics, he noted that each client with a wellness package has an average of 2.5 horses. Each horse receives an average of five different visits per year

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[•]Source: Survey conducted in February 2016 of equine veterinarians who recommended oral joint health supplements.

1. Heinecke LF, Grzanna MW, Au AY, et al. Inhibition of prostaglandin E2 production by the combination of hyaluronan, avocado/soybean unsaponifiables, glucosamine, and chondroitin sulfate involves a NF- κ B dependent mechanism. *ORS* 2011.

2. Heinecke LF, Grzanna MW, Au AY, et al. Inhibition of cyclooxygenase-2 expression and prostaglandin E2 production in chondrocytes by avocado soybean unsaponifiables and epigallocatechin gallate. *Osteoarthritis and Cartilage* 2010;18:220-227.

that include not just wellness care, but also wound, lameness and emergency calls. His practice is called to attend to these other issues in part because the client has bought into the practice's philosophy of excellence in overall health care.

Best Not to Discount

Buchanan urged veterinarians not to discount procedures. He feels that standard pricing resonates best with clients who know you are there to serve and help the horses' health, and that you are administering those services at a fair price.

"The small-animal model puts together a bunch of services at a discount," he said. "Their objective is that they want their clients to use less than 30% of what the client is buying, and they are counting on small-animal owners not using the full package."

By contrast, he wants owners to use everything included in his equine wellness package, because his core value is to help horses and help people. He strongly discourages discounts, instead focusing on instilling in the clients the concept of receiving the best health care for their horses in a program delivered throughout the year at a fair price.

Marketing

"The best method of marketing is word of mouth from clients and also internal staff referrals," said Buchanan. He found that the technicians and receptionists are the most important marketers for the program. With a client on the other end of the phone, that staffer might say, "Are you interested in getting information on our wellness plan?" Similarly, while a veterinarian is on the farm treating colic or performing a lameness exam, the staffer could initiate the conversation about wellness plans. Selling the concept relies on effective communication of the practice's vision of preventive health and wellness.

Other marketing tools, such as adding the wellness program concept into

the business logo, are also important. Direct mailers about the program can be included with billing invoices. The use of Facebook and the practice's website are other methods of marketing this concept.

Buchanan prefers that payment for the wellness package be made up front as a flat fee in January, rather than being paid monthly. This is better for cash flow for the business, takes less effort and manpower to ensure payment by the practice staff, and is more expedient for the client. Fees are locked in for that year, which is another attractive feature. The client must keep his or her account paid in full in order to receive continued care for that horse.

Where Is the Profit?

The wellness package generates 10-15% profit, which is Buchanan's target projection. This is straight profit that comes after factoring out all overhead and veterinarian salaries/commissions. He considers the cost of overhead per minute and adjusts professional fees accordingly to achieve a target profit. It becomes a win-win for the practice, the horse owners and their horses.

It is important to be clear to an associate how his or her compensation for wellness packages will work, stressed Buchanan. In a multiple doctor practice, it is tricky to figure out production and commission/salary when the wellness package is paid for upfront.

Most associates care about their contributions to the business, yet if there are incurred charges not included on the books—because payment for the package was made at the beginning of the year—then it could look like their gross income for the practice was less than their work output would indicate. For associates receiving a straight commission base, there might be some logistics to get them appropriately compensated. If paid a salary, which is often determined by how much work is done by the veterinarian, the numbers need to be

evaluated appropriately to ensure that credit is given for work done for clients enrolled in a pre-paid wellness package.

The Concierge Plan

Buchanan has a second plan that he is trying to promote: a concierge plan. He was able to collaborate with an insurance company to whom he pays a certain amount each year for each horse enrolled in the plan. The age restriction for horses enrolled in the concierge plan is 2-17 years.

Each enrolled client pays \$600 per horse every six months to receive:

- all the services in the standard Wellness Package;
- annual blood work (CBC/Chemistry panel);
- surgical colic insurance up to \$7,500, regardless of whether the horse has traveled out of the local practice area; and
- medical colic coverage up to \$1,000 at any of the Brazos Valley Equine Hospital practices.

Buchanan's practice self-insures the \$1,000 payout. His view is that if the horses receive wellness care throughout the year and clients do as instructed with management, diet and exercise, then there are fewer reasons for a horse to colic.

Take-Home Message

A wellness program rolls a bundle of services into one package, and those are services you are likely to be doing anyway for your clients' horses.

By bundling them into a specific program, clients will feel like they get more bang for their buck and are part of a special group within your practice, one that deserves special attention. It is important to advocate and communicate about this program to your clients, so they are motivated to sign on. This inspires client loyalty while also enabling you to carry out your mission of improving the health and quality of life for your equine charges. **EM**



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Ample natural light provides the primary lighting source for this exam/treatment area. LED lighting is selected in the right color temperature to mimic natural daylight. Artificial light sources are placed far away from ceiling fans to eliminate any strobe effects.



Lighting Work Spaces

Use your knowledge of horses—
and these tips—to better light your facility.

By Tony Cochrane, AIA

Good lighting makes a big difference in the quality of indoor veterinary environments, especially in exam areas. In equine veterinary spaces, proper lighting can also positively affect horses' behavior, making for more successful examinations and treatments.

The Sun Is the Best Lightbulb

Before we discuss the methodologies for good artificial lighting, don't forget that lighting design should start with natural daylight whenever possible. In human healthcare settings,

natural lighting is linked to shorter patient recovery times. Animals are physiologically similar enough to people to benefit from the same supportive properties of natural lighting.

While health benefits are only potentially relevant for inpatient care, using natural daylight first, before artificial lighting, can help equine veterinarians save money. Sunlight provides approximately 140 lumens of light for each watt of heat energy produced (per EnergyStar.gov), making it the most efficient lighting system available. By utilizing properly located natural daylight, a hospital can benefit from significantly lower utility costs.

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¹Data on file at Merial, Safety Study, PR&D 0144901.

²Doucet MY, Bertone AL, et al. Comparison of efficacy and safety of paste formulations of firocoxib and phenylbutazone in horses with naturally occurring osteoarthritis. *J Am Vet Med Assoc*. 2008;232(1):91-97.

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WARNINGS: EQUIOXX is for use in horses only. Do not use in horses intended for human consumption. Do not use in humans. Store EQUIOXX Tablets out of the reach of dogs, children, and other pets in a secured location in order to prevent accidental ingestion or overdose. Consult a physician in case of accidental human exposure.

Horses should undergo a thorough history and physical examination before initiation of NSAID therapy. Appropriate laboratory tests should be conducted to establish hematological and serum biochemical baseline data before and periodically during administration of any NSAID. NSAIDs may inhibit the prostaglandins that maintain normal homeostatic function. Such anti-prostaglandin effects may result in clinically significant disease in patients with underlying or pre-existing disease that has not been previously diagnosed.

Treatment with EQUIOXX should be terminated if signs such as inappetence, colic, abnormal feces, or lethargy are observed. As a class, cyclooxygenase inhibitory NSAIDs may be associated with gastrointestinal, renal, and hepatic toxicity. Sensitivity to drug-associated adverse events varies with the individual patient. Horses that have experienced adverse reactions from one NSAID may experience adverse reactions from another NSAID. Patients at greatest risk for adverse events are those that are dehydrated, on diuretic therapy, or those with existing renal, cardiovascular, and/or hepatic dysfunction. The majority of patients with drug-related adverse reactions recover when the signs are recognized, drug administration is stopped, and veterinary care is initiated.

Concurrent administration of potentially nephrotoxic drugs should be carefully approached or avoided. Since many NSAIDs possess the potential to produce gastrointestinal ulcerations and/or gastrointestinal perforation, concomitant use of EQUIOXX with other anti-inflammatory drugs, such as NSAIDs or corticosteroids, should be avoided. The concomitant use of protein bound drugs with EQUIOXX has not been studied in horses. The influence of concomitant drugs that may inhibit the metabolism of EQUIOXX has not been evaluated. Drug compatibility should be monitored in patients requiring adjunctive therapy.

The safe use of EQUIOXX in horses less than one year of age, horses used for breeding, or in pregnant or lactating mares has not been evaluated. Consider appropriate washout times when switching from one NSAID to another NSAID or corticosteroid.

The Safety Data Sheet (SDS) contains more detailed occupational safety information. For technical assistance, to request an SDS, or to report suspected adverse events call 1-877-217-3543. For additional information about adverse event reporting for animal drugs, contact FDA at 1-888-FDA-VETS, or <http://www.fda.gov/AnimalVeterinary>.

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To use natural daylight properly, orient your treatment and barn spaces to take advantage of southern and northern exposures, as eastern and western exposures can bring in too much heat in most climates. For example, a treatment room lit with a long band of northern light high on the wall will feel ethereal and evenly lit, and it will need fewer artificial lights. When employing southern exposures, use roof overhangs to keep out the hot, high, summer sun, while letting in the low, warm, winter sun. An architect or designer can help you achieve the best results.

Match Nature with Artificial Light

Equine hospitals are by nature indoor/outdoor spaces. Examinations and work-ups might occur inside or outside, depending on the task and the weather. Ideally, the indoor spaces should be lit to feel as natural as possible in order to diminish the contrast between the indoor and outdoor space. LED lighting is the way to go for both energy savings and a natural feel indoors. LED lighting is superior to fluorescent lighting because it:

- naturally mimics the spectral distribution of sunlight;
- eliminates the buzz and flicker you may associate with older light fixtures; and
- comes in a broad range of “color temperatures.”

Color temperatures are expressed in degrees Kelvin. The higher the number, the colder or bluer the light. Direct sunlight is around 4,800K. Select bulbs that are in the 4,000K range to strike a good balance between mimicking natural sunlight and eliminating an overly cold feeling indoors. 4,000K bulbs emit a white, crisp light, and this is also best for making veterinary spaces feel clean, bright and sanitary.

Illuminate for the Task

The next principal of proper lighting is to

consider the task and light appropriately for it. While this might seem elementary, many veterinarians do not have access to information about how much illumination is needed based on task.

Below are rules of thumb for illumination, expressed in the illuminance measure “foot-candles.” For reference for the standards below, 30 foot-candles is a typical office building space illumination level.

- 20 foot-candles is the minimum for storage spaces and barn aisles.
- 30 foot-candles is the minimum for utility spaces where tasks are performed (laundry, feed rooms, etc.), as well as for equine outpatient stalls and offices.
- 45 foot-candles should be used for lab and pharmacy spaces, where more detailed tasks are performed.
- 50 foot-candles is the minimum for equine exam and treatment spaces and medical stalls.
- 75 to 100 foot-candles is the minimum for surgery rooms.

Your electrical engineer or lighting designer should be able to design to the above standards, and it is critical that he or she does so to ensure that your facility works as well as you want it to.

In addition to general illumination levels, consider the following when designing the lighting in an equine veterinary space:

- Light the area you want to see into more brightly than the area around it. For example, medical observation stalls should always be more brightly lit than the stall aisles in front of them, so doctors and technicians can readily see the patients.
- Provide secondary task lighting at work surfaces. For example, pendant lights over the reception desk will help light the transaction counter where clients are filling out forms.
- Provide cross lighting for all equine stocks and other stationary exam areas. Install light fixtures on both sides



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of the equine stocks rather than right over them. This will help you achieve even, glare-free illumination.

- Provide dimmable lighting. LED lights are easy to dim, and this is a great feature to incorporate when you need to turn the lighting down when daylight levels are high, for example, or to keep patients quiet in their stalls.

Avoid Shadows

Horses are prey animals, and they constantly watch for danger. While horses can see about 350 degrees around their bodies, they lack much binocular vision, and they have trouble with depth perception. For these reasons, they are afraid of dark corners, shadows and other areas that are hard to comprehend visually.

We want to eliminate fear in veterinary spaces, so equine veterinary treatment areas should be lit evenly, brightly and without shadows. Use these techniques:

- Space the light fixtures evenly for even illuminance in all areas of the room, especially corners and room edges.
- Avoid blocking light fixtures with furniture or equipment.
- Light connecting spaces evenly to avoid shadowy, foreboding vistas.
- Avoid conflicts between ceiling fans and light fixtures. If ceiling fans are hung under light fixtures, they will cause a “strobe” effect, which is the opposite effect from what we would hope to achieve in a space intended to keep horses calm. Space the lights far from the ceiling fans, or hang them below the fans.

Choose the Right Fixtures

In equine areas, it is important to choose practical lighting fixtures. Equine veterinary areas are generally dusty and sometimes damp, and must be safe.

Choose light fixtures with sealed,

Use your knowledge of horses and how light affects them to create better work and rest spaces for your patients.

damp-rated covers for safety and ease of cleaning.

Do not choose anything that is shaped like a basket or bowl, or it will collect every dead moth in the county in the first two weeks after installation, and that will cause a constant cleaning hassle for you.

In areas where large equipment could bump a light fixture (such as in barn aisles), choose fixtures with safety cages over them.

Reduce the number of bulbs you will need to stock by choosing fixtures with identical bulb types, when possible. This is not as important with LED lighting as it is with fluorescent fixtures, because LED bulbs are replaced infrequently. Still, standardizing your bulbs will make your life easier.

Go the Extra Mile

In the design world, we are starting to better understand the relationships between lighting and physical and psychological well-being. Picture a police interrogation room; it is often depicted in movies as having a single, yellow lightbulb hanging from above a table. This space is lit that way to make the person being interrogated feel uncomfortable.

Many horse owners already know something about lighting's relationship to a horse's physiology. Show barns use extended artificial lighting to prevent the horses' winter coats from growing. In equine veterinary settings, we can embrace this way of thinking about the power of lighting in a way that is focused on equine health and wellbeing.

The more we recognize the way a horse sees, the more we can provide lighting that promotes the comfort of horses. For example, night emergency

lighting typically utilizes blue light. But blue light is not desirable as night lighting in equine medical barns, because horses

see very well in the blue end of the spectrum, and they have a hard time resting under constant blue light.

Use red emergency lighting instead, and this problem is eliminated, as horses do not see the red end of the spectrum. A medical barn lit at night with low levels of red light would be restful and dark as perceived by the horses.

While there are likely many undiscovered relationships between lighting and wellbeing, we offer these additional thoughts:

- Replace any fixture that noticeably flickers, as horses perceive the flickering of the fixture more clearly than we do.
- Use LED lights when possible. As described in this article, LED lighting is superior, but when we consider a horse's perspective, it is the best lighting to use. LED lights produce an even spectral distribution, heavy on the bluer end of the spectrum. Horses do not see red and orange frequencies, so LED lighting is essentially tuned to their visual acuity, which helps them see and perceive spaces better.
- Use high levels of even illumination in arenas and work-up areas. Because horses do not perceive depth well, a poorly lit work-up area can be visually distracting for the horse, which can lead to a less successful lameness exam.

Take-Home Message

Veterinarians should consider what horses see, how they think and what elements help to create good spaces for working with them. Whether you plan to build a new facility or simply upgrade your current lighting fixtures, apply your knowledge of horses to create well-lit, low-stress spaces. **EM**



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The filters or lenses unique to each of us influence how we send and receive messages.



Intergenerational Communication

Understanding how you send and receive messages can improve your connection with different age groups.

By Colleen Best, DVM, PhD

Communicating is something we've all been doing since before we can remember, and it occupies much of our time each day. Despite the vast experience we all have as communicators, miscommunication is a common occurrence.

This begs the question: Why is it so difficult to communicate effectively, to convey a message and have it be received in the way it was intended, or to receive another's message clear-

ly? In my experience, it is often because of the filters or lenses unique to each of us that influence how we send and receive messages. These filters introduce complexity and intricacy into communication.

Our experiences determine the way in which we perceive the world; they create and shape our filters. To this end, our experiences influence the way we interpret other people and the way we communicate with others. While each person's experi-

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ences are unique, generations of people have many shared experiences based on world events that occurred during their formative years. For this reason, it can be beneficial to understand the generalized perspectives of generations, because they shed light on how individuals might communicate and view the world.

There are four main generations in the workplace today: the Silent Generation, or “matures”; the Baby Boomers; the Gen Xers; and the Millennials.

The descriptions below are merely a guide and are unlikely to fit everyone in a particular generation.

Silent Generation— Born Prior to 1946

Individuals of this generation have experienced the most amount of conflict—i.e., World War II, the Korean War and the Vietnam War. They were also

raised by parents who experienced both World Wars and the Great Depression.

Members of this generation grew up in a largely pre-feminist era in which women tended not to work outside the home. From a career standpoint, loyalty to companies and jobs was strong, and often, the same job was held for life. The “Silents” are often described as “disciplined, self-sacrificing and cautious.”¹

Baby Boomers— Born 1946-1964

This generation has been referred to as the “me” generation, and its members have been described as “self-righteous and self-centered.”¹ They began the wave of changing common values, including women working outside of the home and the social acceptance of divorce.

Television was common. Individu-

als from this generation are hopeful, motivated and team oriented; they also welcome and respect hierarchal structure and tradition.

Generation Xers— Born 1965-1979

The children of this generation were often home alone while both parents were at work; it has been said that television raised this generation.

Further, the way in which knowledge was accessed shifted from paper to digital during their formative years. As adults, they tend to be individualistic and prefer to rely on themselves; however, they often retain a strong sense of family and want to be “present” parents, unlike their own.

Members of this generation prefer to commit to themselves, as opposed to members of earlier generations, who

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committed to an organization. The value shift that began with the Baby Boomers continued with this generation's concern for individual rights, particularly those of minority groups.

Millennials—Born 1980-2000

Millennials were raised by hopeful, present and active parents. They were taught to believe that they are unique and valuable. Individuals respect authority, prefer to schedule activities and like to work in teams.¹ They experience significant levels of academic pressure and have high expectations of themselves.

With respect to careers and work, they prefer a relaxed work environment with support and feedback. Due to the accessibility of information, they tend to hold strong views.

How to Use Generational Knowledge

Knowledge of the generational characteristics of the person with whom you are talking provides a jumping-off point for trying to better understand where another person is coming from. This supports effective communication, because it can provide insight and clarity into the other individual's position, which in turn can support better understanding of the message that person is trying to convey.

Knowledge of a generation's stereotypes does not preclude the need to learn about its members as individuals. Interactions should be approached with a sense of curiosity and an open mind, and questions asked with the intention being to listen and understand, not to formulate a response. This will facilitate effective

listening and foster relationship building.

A veterinary practice's culture is one area in which generational differences can become apparent. Each generation values different characteristics in a work environment. A Silent is more likely to value stability and hard work, while a Gen Xer is likely to value flexibility and the ability to work independently. A Millennial is likely to prioritize his or her family needs and want a schedule that permits time for enjoyment.

Imagine a situation where there is a Silent practice owner who is trying to create a new schedule for three different generations. Trying to meet the needs of each might seem indulgent given the importance that Silents place on a strong work ethic. Imposing a schedule with little consultation or flexibility is likely to result in frustrated and unhappy veterinarians.

Another source of intergenerational strain surrounds the language each uses to communicate. Slang or jargon can be generation specific, and it can be confusing or isolating to those who are unfamiliar with the meaning of those words. A further source of friction might be the informality with which the Gen Xers and the Millennials often interact. Silents and Boomers are accustomed to a certain formality in a workplace that is no longer commonplace. This lack of formality can be seen as a lack of commitment, a lack of sincerity or even a lack of respect.

However, younger generations might prefer the decreased formality because it can allow for stronger workplace relationships and greater honesty.

Another aspect of intergenerational relationships and communication that should be considered is that, for the most part, those in different generations are in different life stages. It can be difficult to understand the stresses and strains of those who are not in the same life stage as we are, even if we have passed through the stage that the other person is presently experiencing.

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Here are some steps to consider regarding intergenerational communication:

Recognize and acknowledge differences.

When interacting with another person, it can be easy to spot ways in which he or she differs from you, whether they be differences of opinion, personal values or life outlook. What can be more difficult is simply observing these differences instead of assigning a judgment or value statement to them.

Instead of judging the other person, or that person's values, as better or worse than you or your values, it's helpful to take note of the differences and seek to determine whether there is a problem instead of assuming there is one.

Determine whether there is a problem, and if there is, identify it.

Too often, judgments are made quickly and, before much thought has been given to the situation, decisions or actions follow. Sometimes the only thing that separates a difference from a problem is perspective or communication!

It's important to ask questions to ascertain the other person's perspective, and to determine if in fact the differ-

ence *is a problem*. It can be challenging to garner the courage to start a conversation to determine the reality of the situation. However, if it is left unaddressed, resentment and frustration can build on both sides.

Become goal- and solution-oriented.

If you determine that there is a problem, not just a difference, identifying a mutual goal or the qualities that the solution would possess are big steps toward resolving the issue.

Assess the facts and together discuss what an appropriate goal or solution would look like. This places the focus of both parties where it should be—on moving forward. This tactic can help decrease the divisiveness and defensiveness that frequently stem from focusing on differences.

Only once it is clear what needs to be done can a discussion of what it would take to get there occur. If challenges about how to achieve the goal occur during the conversation, return to the mutually agreed-upon goal and assess each option on the basis of its ability to contribute to the goal.

Boundaries

When considering each generation's

characteristics, one important difference to remember is the values that each holds. It can be easy to assign greater importance to those values that one holds dear and to negatively judge those whose values are different.

While this behavior might be common, it can contribute to conflict and complicate communication. Having clear interpersonal boundaries can help decrease conflict and is supportive of respectful relationships.

Boundaries are limits set to define ourselves—and what we think and feel—from how others view us. Boundaries can be protective, because they allow us to be less vulnerable to others' impressions. Instead, we can be more confident and assured of what we believe to be true about ourselves and our actions.

A person's intentions, thoughts, beliefs and values belong to that person alone. In situations of intergenerational clashes, asserting healthy and clear boundaries can help decrease defensiveness and conflict. **EM**

Reference

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