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EQUINE DISEASE QUARTERLY

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A PREVIEW OF THE JANUARY 2026 EDQ

This issue of the Equine Disease Quarterly leads off "foal season" with timely articles about equine reproduction. The Research Spotlight features Dr. Hossam El-Sheikh Ali's laboratory, focusing on placentitis, which causes approximately one-third of late-term pregnancy losses. His laboratory group is leveraging basic science research to develop a blood-based test that effectively identifies the onset of placentitis far earlier than currently used approaches in practice. His work also uses state-of-the-art techniques to better understand the underlying mechanisms of disease, thereby enabling novel, targeted treatments. Similarly, Dr. Tom Stout shares a thoughtful reflection on the failure to get pregnant, pointing out that many commonly used treatments may be inappropriate for sub-fertility and that failure to get pregnant in not inherently a disease. He echoes the need for more targeted approaches as our understanding of sub-fertility improves. The goal of getting mares in foal and producing a live foal can be a real challenge and we expect these specialists' research programs to enhance breeders' odds.

After the success of having a live foal and getting the horse to the track, Dr. Mick Peterson's expertise comes into play. He describes the advances in the comprehensive monitoring and data integration across North American tracks with the end goal of safer racing surfaces. The science that undergirds engineering and maintaining safe racing surfaces is incredibly complex yet is elegantly explained in this article.

Infectious agents continue to challenge the equine industry.

Dr. Kindra Orr reviews Pigeon Fever, which has nothing to do with pigeons, per se, but is due to Corynebacterium pseudotuberculosis biovar equi, a globally distributed bacterium that causes disease in horses, most commonly as external abscesses, but occasionally as internal abscessation or ulcerative lymphangitis, with internal disease carrying high mortality if untreated. Dr. Orr reviews the pathogenesis, diagnosis and treatment of the disease, one which recently garnered attention in central Kentucky, among other places, this past year.

Dr. Feng Li provides the rationale behind development of an equine vaccine for Rotavirus B. Importantly, he details the key differences between rotavirus A and B, explaining why antibodies and vaccines against rotavirus A do not protect against rotavirus B. Farms that have experienced diarrheic outbreaks of either rotavirus A or rotavirus B infections in foals will be appreciative of Dr. Li's leadership in developing a safe, rotavirus B vaccine. Upcoming hurdles include USDA approval and commercialization. Dr. Li, his team at the Gluck Center and our industry partner continue to lead the way.

Finally, Dr. Lutz Goehring provides a collated update of reported equine infectious disease occurrences across the globe. Many of the "usual" active outbreaks are occurring; however, a vesicular stomatitis virus (VSV) outbreak in Arizona and New World Screwworm (NWS) infestations in northern Mexico deserve a special mention, given the timing and proximity to the United States, respectively. NWS disease threats were reviewed in the last EDQ issue. Dr. Goehring also summarizes the activity of Equid alphaherpesvirus 1 (EHV-1) outbreaks which negatively impacted race and showing events in the last quarter of 2025.
Turn the page!

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New Frontiers in Placentitis Research: Discovering Diagnostic Biomarkers and Novel Therapeutic Targets

In the equine industry, few events are as devastating as pregnancy loss. Placentitis (infection and inflammation of the placenta) is the leading cause of late-term abortions, stillbirths and premature births in the United States, accounting for nearly one-third of these losses, which are not only heartbreaking for breeders and owners but also represent a significant economic burden to the equine industry. At the University of Kentucky's Equine Reproduction Laboratory, our research is dedicated to overcoming these challenges by developing innovative diagnostic and therapeutic strategies.

The Diagnostic Challenge: Discovering Early, Reliable Diagnostic Biomarkers

Detecting this condition at an early stage is crucial for effective treatment. However, the early signs of placentitis can often be missed when relying on clinical signs or ultrasound alone. By the time noticeable signs appear, the disease is often advanced, making it harder to treat and increasing the risk of pregnancy loss.

To address this, our lab is pioneering the use of blood proteomics, an advanced technology that analyzes the entire protein profile of a blood sample. Our preliminary research has identified specific proteins that change substantially in mares with placentitis compared to healthy mares. We are now expanding this work to verify and validate the top-performing biomarkers (i.e., biomarkers with highest sensitivity, specificity and accuracy). A reliable blood screening test would allow veterinarians to identify at-risk mares much earlier and with greater confidence, enabling treatment to begin before the disease progresses.

The Therapeutic Challenge: Stopping the Inflammatory and Contractile Events

During normal pregnancy, uterine muscle (myometrium) contractions remain uncoordinated until the foal is ready to be born. But in mares with placentitis, molecular signals cause the uterus to contract too soon, a process known as myometrial activation. For decades, the mechanisms driving this early contraction process have remained unclear.

Our research group is addressing this knowledge gap using transcriptomics, a technique that analyzes gene expression patterns. We have identified a key initiator of both inflammation and premature contractions: Toll-like receptor 2 (TLR2). This receptor functions as an alarm system, detecting invading pathogens and activating genes that drive inflammation and uterine contractility.

The discovery of TLR2's central role opens a new frontier for therapy. By developing treatments that block this specific alarm, such as TLR2 antagonists, we may be able to prevent premature labor response altogether. This approach would complement existing antimicrobial and anti-inflammatory therapies, allowing them more time to work and creating a comprehensive strategy that addresses all aspects of the disease: infection, inflammation and premature uterine activation.

Rebecca Hutchinson is a graduate student in the UK Equine Reprodution Laboratory under the mentorship of Dr. Hossam El-Sheikh. Photo courtesy, UK Martin-Gatton College of Agriculture, Food and Environment.

Looking Ahead

Our efforts to develop reliable diagnostic biomarkers and targeted therapeutics aim to fill critical gaps in the management of equine placentitis. Our goal in the Equine Reproduction Laboratory is clear: to improve live foal rates and pregnancy outcomes for mares and reduce the substantial economic losses associated with this disease.

These projects are supported in part by the 2024 Equine Research Award - Boehringer Ingelheim and start-up funding from the Gluck Equine Research Foundation.

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Is failure to get pregnant a disease that needs treating? A Discussion.

Pregnancy is an outlier in the medical world in that it is not a disease and does not, therefore, require treatment. That is not to say that there aren't many conditions or diseases that can compromise pregnancy; there are, but failure to become or stay pregnant is not usually accompanied by obvious signs of disease. This is inconvenient to those offering medical services and, as a result, human fertility specialists have decided that female sub-fertility should be considered a "disorder." Of course, a disorder requires a definition, and it is now widely accepted that failure to get pregnant within a year of trying indicates that a woman, her partner or both are sub-fertile, and that an intervention is required. While this is useful for fertility clinics, it ignores the fact that failure to establish pregnancy is often down to chance, and many cases of sub-fertility 'resolve' within a further year of trying, without any treatment.

In horse reproduction, failure to become pregnant within three cycles of mating or insemination with (semen from) a fertile stallion is considered the point at which further investigation is recommended. For an embryo recipient (surrogate) mare, failure to get pregnant after transfer of two 'normal' embryos is similarly considered a reason to classify the mare as problematic. Of course, at the sharp end of equine breeding, simply waiting or repeating the same management strategy and hoping is not an option, not least because of the constraints of a five-month breeding season. There is also an obvious financial imperative; it has been estimated that, if a Thoroughbred broodmare is considered an investment, failure to produce a foal in at least six years out of seven will, on average, result in financial loss. Given an 11-month gestation, this means that a foaling mare needs to get pregnant within a month of giving birth if she is not ultimately to become an economic liability. In this light, it is not surprising that every effort is made to ensure that mares get pregnant as efficiently as possible.

Nevertheless, proving that it is necessary to instigate treatment for sub-fertility is difficult, not least because while pregnancy is a binary trait (i.e. a mare can be pregnant or not, but she can't be 'a bit pregnant'), fertility is much less black and white. This is more obvious for stallions, which often cover multiple mares per season. Indeed, within the population of 'normal' breeding stallions, pregnancy rates vary from around 35-80% of mated estrous cycles. There is no reason to assume that mare fertility does not show similar variability, but it is more difficult to quantify because few mares will produce more than a dozen foals in a lifetime. In addition, to prevent overuse of popular stallions, or escalating costs of repeated semen transport, veterinarians are expected to try to minimize the number of matings per pregnancy.

Some of the steps involved in optimizing the likelihood of pregnancy make good sense, e.g. screening mares (and stallions) to make sure that they are free of obvious reproductive pathology or venereal pathogens before breeding and careful monitoring of the estrous cycle to ensure that it progresses normally and the mare gets bred close to the time of ovulation. Thereafter, whether one should 'do everything possible' to help becomes ethically more challenging; some mares will benefit from the intrauterine inoculation of antibiotics after breeding or supplementation with synthetic progestogens during early pregnancy; most will not. Sometimes it will be obvious that a mare requires additional therapy to resolve a problem, other times it won't. Concerns about possible failure to maintain pregnancy have given rise to numerous 'just in case' treatments, with the assumption that therapy may help and is unlikely to harm. In this respect, while all pharmaceuticals have potential detrimental side-effects, most are either trivial or rare. However, an individual animal or body-system view of 'it shouldn't harm' is under increasing pressure due to heightened awareness of the longer-term downsides of widespread antibiotic or hormone use, e.g. stimulating antimicrobial resistance, disturbing the normal microbiome (bacterial flora) and predisposing to other diseases, or compromising fertility in other species by introducing reproductive hormones into the environment. This doesn't mean that treatments aimed at improving the likelihood of pregnancy are always wrong, but it does highlight why research is needed into alternative ways to combat pathogenic bacteria, enhance fertility and/or more accurately identify mares that really require treatment. Progress in these directions should also help remove the specter of government regulations to limit the availability of therapeutics in veterinary medicine and/or the risk of inadvertently uncovering new diseases, or making it more difficult to treat existing ones.

These issues should prompt us to ask the question of whether failure to get pregnant should always necessarily be seen as a disease requiring a pharmacological solution; based on current research, it often is not.

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Racing Surface Consistency

Photo courtesy
Racing Surfaces Testing Laboratory.

Safety and performance of equine sport surfaces have been hotly debated, especially in Thoroughbred racing. This discussion is complicated by the fact that risks to the horse and rider are multi-factorial. A perfectly sound horse is unlikely to be injured even on an imperfect racetrack. However, horses with pre-existing injuries may be placed at higher risk by any inconsistencies in the racing surface.

While a consistent surface also allows trainers, riders and owners to more easily assess the conditioning of the horse and reduce the time required to adapt to a new surface, the safety of the horse and rider is the first priority. Standardization of data collection and testing make it possible to collect the long-term data required to understand the role of the multiple factors that contribute to safety. Placing an emphasis on consistency, both spatial and temporal, is a pragmatic way to acquire data at the large scale required to assess safety. However, it is critical that measurements are made with standard methods and documented in a manner that allows the resulting large data set to be used to develop safer racing surfaces. In the meantime, enhancing the fairness of the track, and perhaps eventually the safety, has been possible at individual racetracks and is now making it possible to reduce variability between tracks within a region.

The specific racetrack characteristics that are being measured determine how frequently testing needs to be performed. Evaluation can be divided into three testing categories: low frequency, medium frequency and high frequency. Track design is a long-term characteristic that does not require frequent evaluation (low frequency) and includes turn radius, turf species, turf profile and the materials selected for dirt or synthetic materials selected for the local climate. Medium frequency testing is required for characteristics that should be measured on a yearly or semi-annual basis and include material segregation, wear and contamination of the surface, damage to the base, formation of a consistent hardpan layer, compaction of turf or separation and compaction in a synthetic surface. Daily testing (high frequency) is required for characteristics that may change daily, or even hourly, including moisture content on dirt or turf surfaces, divots in turf, cushion depth on dirt and synthetic and temperature of a synthetic surface. All of these factors change the hoof surface interaction and potentially influence the safety of the horse and rider.

Accurate information about the track design is not always readily available. Racetracks with recent renovations may have engineering drawings with data such as turn banking and crossfall. For many of the tracks, design information requires surveying the base or compacted cushion to understand the original track design. Turf tracks present additional issues since even surveys may not represent the original design due to changes from compaction and top dressing. Furthermore, historic track information on material composition can be unreliable since different laboratories use testing protocols borrowed from a range of industries and applications, including civil engineering, agriculture and even metal casting. For Thoroughbred racetracks, consistent testing based on standard methods has now been available for three years. Composition targets are now based on multiple years of data, and the potential exists to gradually introduce modifications to more closely align the response of racetracks within a region.

Nearly all North American tracks now conduct annual or semi-annual (medium frequency) testing. This testing originated with a 2008 study supported by Churchill Downs Incorporated which included biomechanical surface testing, which simulates the hoof loading from the forelimb of a Thoroughbred at a gallop and ground penetrating radar. This effort was expanded in 2020 when The Jockey Club provided funding to build and purchase sufficient testing equipment to assess all of the North American Thoroughbred racetrack surfaces. For racetracks covered by the Horseracing Integrity and Safety Authority (HISA), the cost of testing was funded by HISA to facilitate compliance with federal regulations. Characteristics of the track that are assessed include base inconsistencies, radial and circumferential depth variation, material inconsistencies and inconsistent harrowing and grading. Changes to the profile or areas of differential compaction are also evaluated in turf, dirt or synthetic materials by using biomechanical surface testing, ground penetrating radar and composition testing based on seven standard samples from each track. All testing is done prior to race meets so that sufficient time is available to identify causes of variation and assist local experts in correcting the problems.

The high frequency data, (track characteristics that can change on a daily or even hourly basis), are the most challenging to monitor. Weather stations installed at many of the tracks are supplemented by a weather service that provides hyperlocal weather estimates for the racetracks. The racetracks also take daily measurements of cushion depth and moisture on dirt tracks after training and before racing. For turf surfaces, measurement includes the penetration of a probe pressed by a mass into the surface and moisture. For synthetic tracks, the measurement of surface temperature and depth of the cushion are obtained. Currently, most of the tracks manually enter this data into the database. Automation of the data upload to the database and more precise measurement of cushion depth have recently been used by some of the tracks to improve the accuracy of the data and reduce the time required for testing.

All three data sets, low, medium and high frequency, are integrated into a single relational database for analysis and reporting of the data to HISA. The Maintenance Quality System (MQS) was introduced in 2014 as a way to describe the overall approach to racetrack measurement and reporting for consistency. The MQS introduced the standard testing methods and maintenance equipment tracking along with a database to compile the information for analysis. In the longer term, meaningful analysis of surface data will require that other factors, including race conditions, veterinary treatments and other horse level conditions, are included in the analysis. This is an exciting time in Thoroughbred racing. As a result of the new federal regulations and broad industry cooperation, we are approaching a point in the future where we may be able to say, “This is a safe track.”

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Corynebacterium pseudotuberculosis (Pigeon Fever) in Horses

Corynebacterium pseudotuberculosis is a gram-positive, intracellular, facultative anaerobic bacteria with worldwide distribution. Two biovars of the bacteria are present, distinguished by restriction fragment length polymorphisms and nitrate reducing capabilities. Biovar *ovis* is nitrate negative and is typically found in small ruminants and cattle, causing caseous lymphadenitis, abscesses and mastitis. Biovar *equi* is nitrate positive and causes clinical disease in horses.

Three manifestations of the disease have been described in horses; the most common is external subcutaneous abscessation that frequently occurs in the pectoral region or ventral abdomen (hence the name 'Pigeon Fever'). The second manifestation of the disease can cause internal abscessation, while the third manifestation causes an ulcerative lymphangitis of the limbs. While internal abscessation occurs in less than 10% of *C. pseudotuberculosis* infections, mortality rate can range from 29% to 40% and increases to 100% among horses that do not receive antimicrobial therapy. In addition to the three classic disease manifestations, septic arthritis, osteomyelitis, guttural pouch empyema and abortion, have all been observed with C. pseudotuberculosis infection in horses.

Definitive diagnosis of C. pseudotuberculosis can be made with bacterial culture or PCR of purulent material from abscesses. Internal abscessation can be more difficult to diagnosis and often requires ultrasonography, clinicopathology and serological testing (synergistic hemolysis inhibition, SHI Test). Treatment of external abscesses may resolve with localized drainage and supportive care while horses with internal abscesses or ulcerative lymphadenitis require prolonged systemic antimicrobial therapy.

Infection is thought to occur through contact with contaminated soil through skin abrasions or mucous membranes. In addition, it is believed that insects such as horn flies (*Haematobia irritans*), stable flies (*Stomoxys calcitrans*) and house flies (*Musca domestica*) act as mechanical vectors, spreading the bacteria through abrasions in the horse's skin. Horse-to-horse transmission is also likely.

Traditionally, *C. pseudotuberculosis* has been associated with dry, arid climates in the Western United States, with outbreaks typically occurring in the late summer or fall. However, outbreaks across the U.S. and Canada have been observed in recent years, including in non-endemic areas such as Kentucky, Louisiana, Michigan, North Carolina, South Carolina, Utah, Colorado, Oregon, Florida and Idaho. Often outbreaks are documented during dry months of the year after winters with above average rainfall, which provides optimal breeding conditions for insects during the following summer and fall. Once the bacteria become endemic in an area, infections tend to occur as sporadic cases with a prevalence of 5-10%.

To limit the spread of disease, biosecurity practices should be employed, focusing on reducing environmental contamination and prevention of transmission via insects and fomites. Gloves should be worn while treating infected horses and all purulent material and contaminated supplies should be properly disposed of. *C pseudotuberculosis* is very resilient, and work by Spier et al. has shown the bacteria can survive up to eight months in soil of various moisture contents. Moreover, the addition of manure to soil enhances survival of the bacteria.

C. pseudotuberculosis was first discovered in California in 1915 and it is hard to imagine that 110 years later we would be seeing increasing cases over an increasing geographic area. Veterinarians and equine professionals cannot overlook the emotional and economic impact of this persistent disease and continued research remains warranted.

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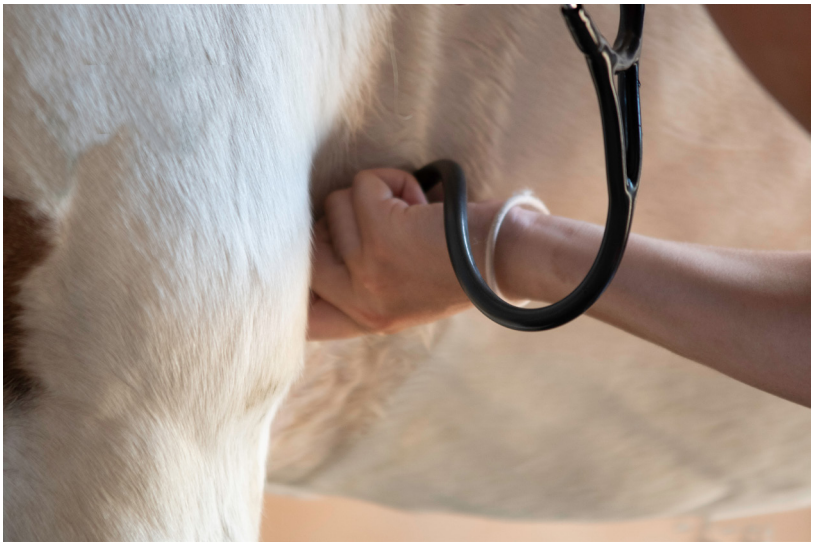

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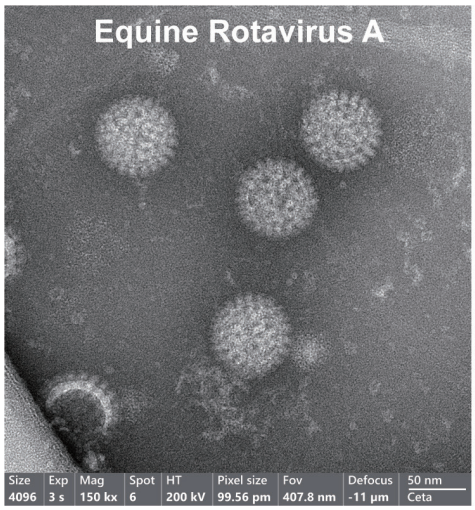
Equine Rotavirus A and B: understanding their similarities and differences



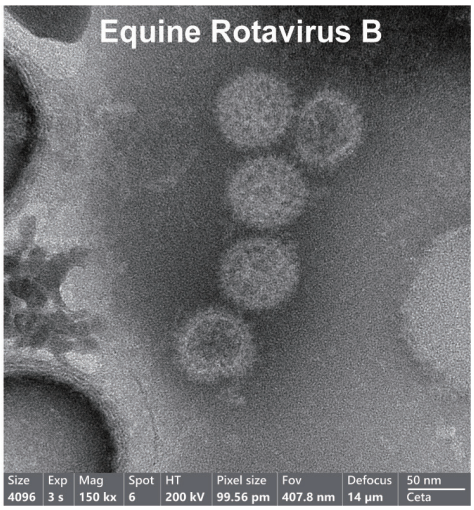


Image courtesy Dr. Feng Li.

Rotavirus is the most common cause of clinical diarrhea with gastrointestinal symptoms in foals less than 6 months old. It is transmitted through the oral-fecal route. When foals get infected with an equine rotavirus, they can develop severely watery to bloody diarrhea. It can become life threatening for infected foals if left untreated. Currently, there are two groups of rotaviruses circulating in horses. Equine rotavirus group A, (consisting of two distinct G3P[12] and G14P[12] genotypes), is the most common, followed by equine rotavirus group B. Both rotavirus groups are highly contagious and produce similar symptoms in infected foals, including inappetence, lethargy, dehydration, severe electrolyte imbalance and watery yellow diarrhea.

Equine rotaviruses A and B are similar in viral genome structure and morphology. The genome in both viruses consists of 11 sets of genes, and these gene sets are enclosed within the capsid proteins. Morphologically, both viruses show a wheel-like shape with icosahedral symmetry without an envelope, which is built by the triple-layered capsid proteins with a diameter of 80–100 nm in size. The inner layer is made up with the VP2 protein, while the middle layer is composed of the VP6 protein. The VP7 protein forms the outer layer protein from which viral spike protein VP4 protrudes. Of the three concentric layers, VP4 and VP7 proteins in the outer capsid shell are responsible for the virus entering the epithelial cells in the villi of the small intestine and spreading infection, causing diarrhea in foals. The VP4 protein is cleaved by cellular proteases into two subunits, VP8* and VP5*, with VP8* involved in binding the cell surface glycan receptor and VP5* responsible for the host cell membrane penetration. VP7 function remains poorly understood but its roles in viral uncoating, genome transcription and viral assembly have been proposed.

Because VP4 (VP8*and VP5*) and VP7 proteins are on the surface of rotaviruses, they are the first group of viral proteins that gets recognized by the equine immune system when a foal is exposed to a rotavirus. The direct communication between the immune system and viral surface proteins (VP4 and VP7) activates B lymphocytes, which triggers the production of specific antibodies against VP4 and VP7 proteins on that invading rotavirus. VP4 and VP7 proteins are called rotaviral antigens. Historically, according to the protein abundance and the magnitude of antibody production, VP4 is named as the minor antigen, while VP7 is dubbed as the major antigen. VP4- or VP7-specific antibodies bind to the VP4 or VP7 protein of infectious rotavirus particles and prevent them from attaching to and entering the intestinal epithelial cells of foals, which as a result, block rotavirus replication and disarm its infectivity and spread among foals. Such functional antibodies are scientifically viewed as virus-neutralizing antibodies that are immune correlates of protection.

Despite equine rotaviruses A and B having a lot in common, including clinical symptoms and viral genome structure and morphology, there are substantial differences between the two rotavirus groups in horses. One notable difference is that equine rotaviruses A and B have different VP4 and VP7 proteins that are on the outer layer of their virus particles. In this context, antibodies raised against VP4 or VP7 protein of an equine rotavirus A will not recognize and bind its counterpart on the surface of an equine rotavirus B, and the reverse is also true. And therefore, the Zoetis Rotavirus Group A vaccine, extensively used in equine industry for control and prevention of circulating rotavirus A infection in horses, will not protect foals against infection by equine rotavirus B. Lacking cross-protection between equine rotavirus A and B has been clearly demonstrated during the recent equine rotavirus B outbreaks: foals born to dams receiving Zoetis Rotavirus Group A vaccine came down with clinical diarrhea caused by rotavirus B, not rotavirus A.

In response to a critical need to develop an equine rotavirus B vaccine, through partnership and collaboration with the biotech company and equine industry, the Gluck Equine Research Center has developed two forms of equine rotavirus B vaccines with different mechanisms of action. One vaccine is designed to stimulate the production of antibodies to block the attachment of equine rotavirus B particles to the equine intestinal epithelial cells, the in vivo target cells of equine rotavirus B. The second vaccine is designed to generate antibodies to disrupt the entry process of equine rotavirus B and disarm its infectivity and spread. The proof-of-concept has been demonstrated in recently completed trials involving adult horses and mares/foals. The Gluck Center's equine researchers showed that both vaccines are safe, immunogenic and effective to protect foals from equine rotavirus B infection. Currently, the Gluck Equine Research Center is collaborating with its industry partner to further develop the equine rotavirus B vaccine towards its commercialization so it can be used for control and prevention of foal diarrhea caused by equine rotavirus B, a newly emerging disease in U.S. horses.

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Fourth Quarter 2025

International Report on Equine Infectious Diseases

This report collates information on equine infectious diseases provided by diagnostic laboratories in Lexington, Kentucky, the University of Kentucky Veterinary Diagnostic Laboratory (UKVDL), and Equine Diagnostic Solutions (EDS), Inc. We further included information from the International Thoroughbred Breeders Federation, the International Collating Centre (ICC) in Newmarket/Cambridge, United Kingdom, and information from the American Association of Equine Practitioners' Equine Disease Communication Center (EDCC, EquineDiseaseCC.org). Some information became available by word-of-mouth and is likely incomplete or (yet) unconfirmed by official sources.

S. equi spp equi (Strangles) is omnipresent around the globe. It is the most consistently reported (infectious) disease in horses. This quarter, there are incidental reports of Equine Infectious Anemia (EIA), more consistently from North America than from Europe because of mandatory testing and backtracking strategies to identify exposed horses of a recent nosocomial outbreak in Texas. A cluster of EIA cases in a training facility in Chile has also been reported.

Equine Influenza (EI) has been detected quite regularly in North America during this last quarter. Heightened EI activity has also been recognized by increased numbers of positive nasal swabs through our collaborating laboratories in Lexington. EI is also reported from several countries in Europe, including the British Isles. In addition, there is a vast EI outbreak ongoing in France, with cases reported from several regions simultaneously showing the explosive nature of EI spread.

With a natural decrease in mosquito activity during the fourth quarter of the year, we typically see a decline in West Nile virus (WNV) and Eastern Equine Encephalitis virus (EEEV) cases. We still noticed steady reporting from across the North American continent and, although more sporadic, EEEV cases from the eastern part of Canada and the U.S. WNV cases in Europe were mostly reported from the countries bordering the Mediterranean basin (specifically the South of France and Italy). The Netherlands reported a first case of WNV in October. Switzerland reported its first human (autochtone) case of WNV infection in Canton Ticino bordering with endemic regions in (northern) Italy.

Vesicular Stomatitis virus (VSV) has been detected in Arizona, U.S., and the outbreak is currently ongoing. This outbreak is unusually late for Q4. VSV spreads through insect vectors (sandflies and blackflies) and through direct contacts. It causes lesions on mouth, tongue, muzzle and coronary bands. The 'late-in-the-season' appearance of this outbreak may be associated with unusual high-precipitation weather conditions in the Southwestern U.S. causing changes in insect vector migration patterns.

New World Screwworm (NWS) infestations have been identified in parts of northern Mexico. The condition is caused by NWS fly larvae (*Cochliomyia hominivorax*) consume living tissue or flesh of warm-blooded animals including horses (find more information on EDCC or the previous EDQ). While there have been no recent cases of NWS in the U.S., all efforts focus on prevention of (re)introduction of this pest.

While early in the Northern Hemisphere foaling season, there have been few reports of Equid alphaherpesvirus 1 (EHV-1) abortions. Reports from myelopathy (EHM) outbreaks, including a case of EHM in Japan, were also noted. This is not unusual for the time of the year as EHM outbreaks are more common during Q4, Q1 and Q2 in the Northern Hemisphere. However, an EHM outbreak at the World Championship Barrel Racing (Women's Professional Rodeo Association) Finals in Waco, Texas, early in November led to several satellite outbreaks at home barns of returning horses across the U.S. Two horses who were exposed at the event in Texas developed clinical signs of EHM upon arrival on the grounds of the Barrel Futurities of America (BFA) World Championship scheduled to run in mid-November in Guthrie, Oklahoma. The event was canceled as a logical step in outbreak mitigation. However, satellite outbreaks connected to the index cases in Waco, Texas, developed in eight states. In addition and unrelated to the Texas event, EHM cases/outbreaks were also reported from Western Canada; in sport horses/warmbloods in the MidAtlantic region and from a (Thoroughbred) race track in Florida.

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Photo Courtesy Mark Pearson Photography.