



## Welcome to the EDCC Newsletter

SPRING 2025

The EDCC's mission is to provide timely and accurate information about equine diseases, outbreaks, and biosecurity measures. Our goal is to keep horse owners and caretakers informed, enabling them to take proactive steps in safeguarding the health of their horses. In this edition we aim to bring you the latest updates, expert insights, and valuable resources to help you stay ahead in the ever-evolving field of equine health.

Our newsletter brings you a variety of informative and engaging content. Disease cases and outbreaks totaled 813 last year. As of this year, there were more than 2-million website visits listing the latest disease outbreaks and health threats affecting horses in North America. Our real-time alerts will help you respond quickly and effectively to emerging risks. This edition also highlights the following news:

- Drs. Krista Estell and Katie Flynn, infectious disease subject matter experts, join the EDCC for alert coverage and approval.
- Published EDCC surveys reveal the current status for biosecurity.
- Veterinarians can now submit alerts from the upgraded phone app.

- EDCC partners with Equine Guelph to renovate the Biosecurity Risk Calculator now available on the website.
- Articles on Equine Infectious Anemia transmission and reportable diseases are available on the news page.

At the EDCC, we are committed to delivering high-quality information, which is accurate, up-to-date, and relevant to your needs. We strive to be your go-to source for all things related to equine infectious diseases. Connect with us on the website and social media make the most of your EDCC experience.

Your insights and perspectives are invaluable in helping us improve our services and better serve the needs of horse owners and industry professionals. Please send your suggestions of how we can better inform the horse industry. Together, we can have a positive impact on the health and well-being of horses everywhere.

Warm regards,



Nathaniel A. White DVM MS DACVS  
EDCC Director

## Biosecurity Surveys Reveal Owner and Veterinarian Reliance on the EDCC

During 2022 through 2024 the EDCC completed three surveys as part of a study to evaluate biosecurity for infectious diseases in the equine industry. Funded by the United States Department of Agriculture (USDA) the goal was to identify gaps in understanding and knowledge needed to keep horses safe from infectious diseases. The EDCC is using the information from the surveys to make recommendations for assessing and improving biosecurity at the home facility and while horses travel to participate in events and competitions.

The horse owners in the first survey were found to be tolerant of disease risk (Figure 1) and had a lack of knowledge in applying basic biosecurity such as monitoring a horse's temperature before traveling and isolating new horses when they are brought into a facility. As an example, owners of English Show horses were significantly more likely to always or sometimes to take their horse's temperature before participating in an event. On the other hand, owners of Western Show horses were significantly rare or never to take their horses temperature prior to an event. The survey also found that owners primarily get biosecurity information from their veterinarians (88%) and second from other horse owners (23%) and the EDCC (23%).

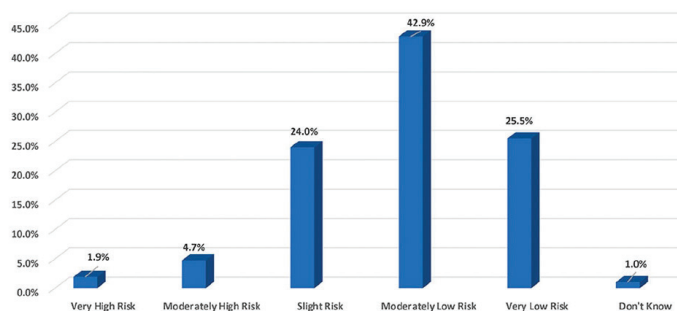


Figure 1: Perceived risk of contracting a disease during co-mingling at horse events.

In a survey of veterinarians 63% responded that owners are not very or not at all prepared to respond to a disease outbreak (Figure 2). Furthermore, there is poor owner compliance in following biosecurity recommendations. Common risk factors encountered by veterinarians included not isolating new horses moved to a facility and lack of owner knowledge of appropriate biosecurity practices. When asked what they needed the most to manage an outbreak they responded affordable point of care tests and biosecurity handouts were identified at 60.8% and 50.5%, respectively.

According to state animal health officials (SAHO) responding to the third survey, 50% revealed they had a lack of adequate personnel and resources needed to manage equine health and reportable disease outbreaks. Disease outbreaks at boarding stables (88%), horse shows (63%) and racing facilities (47%) require the most resources for outbreak

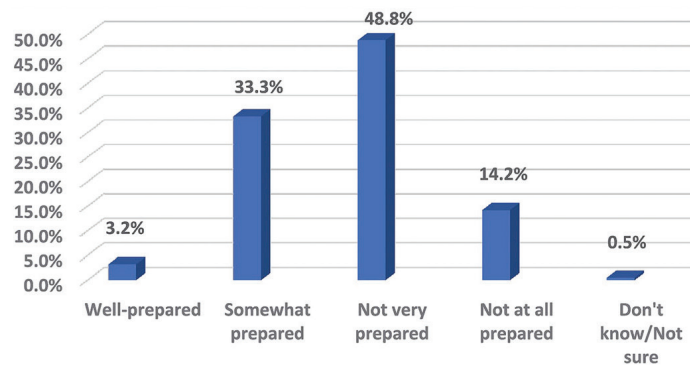


Figure 2: How prepared do you feel most of the clients are within your practice to deal with an infectious disease situation in their stable, farm, or facility?

management. When asked how they utilized the EDCC, 79% followed disease alerts, 60% submitted cases online and 58% used disease factsheets. The survey found that 80% of veterinary practitioners reported diseases to the SAHOs all (26%) or most of the time (62%).

The study highlighted several biosecurity applications and techniques which owners can practice to benefit horse health and welfare. These include reliance on temperature monitoring, isolation of new horses at facilities, understanding risks of disease during competitions, having entry requirements such as vaccination and health certificates at events, and an emphasis on having biosecurity plans for facilities and events where horses co-mingle.

EDCC is working to increase owner knowledge about disease risk and needed biosecurity practices using the survey information. Support from the USDA project helped to create United States Equestrian Federation videos demonstrating biosecurity before, during and after competitions, needed facility cleaning and how to isolate a horse with a suspected disease <https://www.youtube.com/watch?v=QEETbpYJDis>. Additionally, the EDCC partnered with Equine Guelph to update the Biosecurity Risk Calculator <https://www.the-horseportal.com/biosecurity-risk-calculator-tool/> to help owners and veterinarians determine their risk for infectious disease.



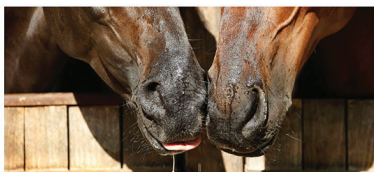
## Equine Guelph and the Equine Disease Communication Center Announce the New Biosecurity Risk Calculator 2.0

A new, innovative online healthcare tool to help horse owners better manage and understand biosecurity risks is now available through a partnership between Equine Guelph and the Equine Disease Communication Center (EDCC).

### Biosecurity Risk Calculator Tool

#### Determine your horse's risk for infectious disease

Infection control means doing what you can to prevent disease; it's all about lowering the odds of a sick horse.



The Biosecurity Risk Calculator will show you how your horse's farm (or stable) rates and provide basic information on infectious disease as well as practical prevention tips.

*Please note: This information provides guidelines only and should never replace information from your veterinarian.*

The Biosecurity Risk Calculator is designed to assess and manage infectious disease risks. The review of the original calculator, which was completed by Dr. Josie Traub-Dargatz Colorado state University Dr. Katie Flynn (United States Equestrian Federation), Dr. Krista Estell (Virginia-Maryland College of Veterinary Medicine), Dr. Scott Weese (Ontario Veterinary College) and Dr. Alison Moore (Ontario Ministry of Agriculture, Food and Rural Affairs)

updated the risk algorithms used to determine biosecurity on farms and facilities. The enhanced tool provides users with easy access to vital information and personalized risk assessments.

This Biosecurity Risk Calculator empowers the equine community to take proactive steps in preventing the spread of infectious diseases. In just ten minutes, owners, veterinarians and their representatives can calculate, manage, and minimize biosecurity threats to keep our horses healthy by going through ten categories for your farm or facility's score.

#### Key Features of the new Biosecurity Risk Calculator:

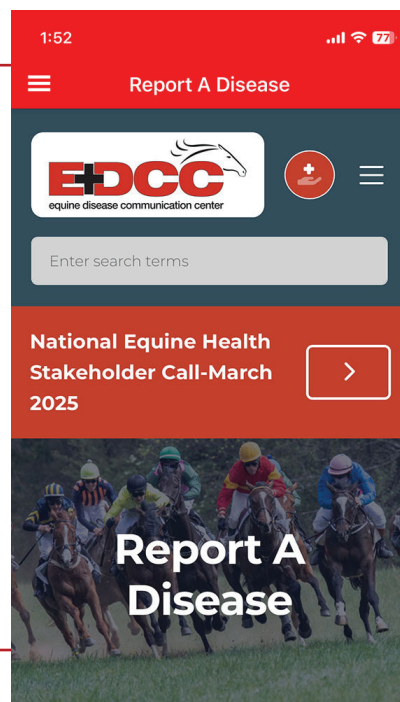
- **Personalized Risk Assessment:** Users can input specific information about their horses and facilities to receive tailored biosecurity recommendations.
- **Educational Resources:** With EDCC as Equine Guelph's a new educational partner, the tool now includes updated educational materials on disease prevention and management.
- **New User-Friendly Interface:** The tool is designed to be intuitive and easy to navigate, making it accessible for all horse owners and caretakers.

The Biosecurity Risk Calculator is now available for free on the EDCC biosecurity page.

### Report Diseases on the Go with Updated EDCC App

With the new and improved EDCC app, veterinarians can now use their phones in the field to submit an infectious disease case to the EDCC.

The case reporting process works the same as using a desktop or laptop computer. Open the app on your phone or tablet and go to the three-bar menu in the top left-hand corner. Choose Report a Disease and you will be taken to the case submitter information page. From there, state animal health officials or attending veterinarians can quickly and easily submit cases from the field directly to the EDCC.



## Understanding State Reportable Diseases

By Leslie Barlow, EDCC Communications Manager

For a horse owner, receiving a positive test result from your veterinarian for an equine infectious disease can be scary and overwhelming. What is the disease? How did my horse contract it? What happens now? What is the role for state and federal animal health officials in disease control management?

Because some infectious diseases, which can cause significant number of sick horses and deaths and are easily spread, individual states and the United States Department of Agriculture (USDA) act on reportable diseases to prevent disease spread.

Upon receiving the positive result, a horse owner might ask themselves what is a reportable disease? A “reportable disease” is defined as having the potential for significant equine health and economic impact on the equids of the United States. The list of reportable diseases is based on international, national, and local diseases of concern. At the international level, the World Organization of Animal Health (WOAH) determines diseases of significant impact which countries must report. At the country level, the USDA must report detections of those diseases and determine if there are additional diseases of concern for the United States which must be reported by the individual state veterinarians. Lastly, state veterinarians with input from their equine industry determine what diseases of concern should be reported within their state.

**“Each state is different because each state assesses their own risk and determines what disease they think are important to control from a regulatory standpoint,”** —Dr. Katie Flynn, current senior veterinarian for equine health and biosecurity at US Equestrian and former Kentucky State Veterinarian. (Dr. Flynn is also an EDCC veterinarian.)

It might seem easier at first glance to create a standardized list of reportable diseases for all states, but Dr. Heather Roney, Wisconsin state animal health official, said, “There are diseases that are common in other states that would be novel or unreported in Wisconsin. So, this (standardized list) is likely not practical or useful. There are some diseases that are federally reportable, our list of reportable diseases would be inclusive of those on the National List of Reportable Animal Diseases from the USDA.”



Figure 3: Vesicular Stomatitis, which causes blisters, crusts and ulceration of the lips, muzzle, nose, tongue, is transmitted by biting midges and black flies and is a reportable disease requiring reporting to a state animal health official and the USDA.

To determine what diseases are placed on their reportable and monitored list, Washington state animal health official, Dr. Ben Smith, said his office works alongside diagnostic labs and the department of health, along with the WOAH guidelines, and includes diseases that are contagious and infectious and of economic importance to the state.

Individual states break their reportable diseases into classifications such as Reportable and Actionable, Reportable and Monitored, and Not Reportable.

For example, WOAH and USDA require equine infectious anemia (EIA) to be reportable so that it is on all lists in each state. Strangles is reportable and actionable in Kentucky but is not considered reportable in Indiana or Texas. Both Virginia and Florida consider eastern equine encephalitis (EEE) as reportable and monitored but not actionable. Pigeon fever is not reportable in Maryland but is reportable and monitored in Washington. Because this can be confusing, owners and veterinarians should be aware of what diseases are reportable in their state.

Some reportable diseases are on the list for monitoring or surveillance purposes only, meaning the state and the USDA are monitoring the disease occurrences for early identification of any changes in the disease such as increases in clinical disease, change in geographic occurrence of the disease, or change in frequency of detection. For example,

*continued next page*



some reportable disease lists contain equine influenza as a monitored reportable disease. Equine influenza is caused by a virus that can mutate and change how it affects horses. By being on the reportable disease list, animal health officials can monitor any changes in clinical manifestations, frequency of detection, seasonality of detection or geographic distribution.

Once the infectious disease diagnosis has been given to the owner by the veterinarian, who reports it and to where? And what happens to the horse and premises where it is kept? Some state laws require the veterinarian and laboratory to report while other states' laws mandate anyone who has knowledge, such as the horse owner, to report the suspected reportable disease.

"The general recommendation is for anyone suspecting a reportable disease to contact a local, state, or federal animal health official- a representative of the state veterinarian's office or of the local USDA- Animal Plant Health Inspection Service (APHIS) Veterinary Services," Flynn said.

State animal health officials work with private practitioners to ensure they know when and how to report positive test results to the state veterinarian's office. Smith said his office provides educational training and outreach to veterinarians to review the reporting process and to answer any questions about what and how to report.

Private practitioners are not required to report non-reportable diseases to the state offices. "Reporting all non-reportable diseases would overwhelm our limited resources," Roney said. "Additionally, some reportable disease results for endemic diseases are reported by the testing laboratory, and we may or may not reach out to the private practitioner for more information about the case."

Once the disease has been reported, each state determines how to respond, specifically whether the disease detection will be actionable or monitored. Actionable responses typically involve a quarantine and movement restrictions while a monitored response focuses implementation of biosecurity and monitoring of disease progression where the horse is located. There is no standard response for any one disease as each response will be dependent upon the disease agent detected, the equine population, and the environment.

It is important for horse owners to work with their state animal health officials in advance of an outbreak to know what you can expect if a reportable disease were to occur. Working in advance with these officials will ensure prompt and coordinated response at the time of detection. Delay in initial detection and isolation of the sick horse shedding the infectious disease agent, typically leads to increased number of horses exposed and sick as well as longer duration of disease outbreak.

The goal of any response to a reportable disease is to stop spread of the disease pathogen to protect equine health. The three core pillars of response are: 1). Early identification of infected horses with health monitoring and diagnostic testing; 2). Immediate isolation of horses suspected or confirmed with a reportable disease pathogen; and 3). Enhanced biosecurity to reduce bacteria or virus in the environment and to prevent further transmission.

To best protect the health of equines, isolation, and movement restrictions of horses sick with an equine infectious diseases are essential, especially for highly contagious diseases. It is critical for a horse shedding an equine infectious disease agent to be isolated to prevent exposure to other horses.

To effectively monitor and mitigate the spread of infectious disease, the EDCC reports on confirmed cases and diseases that have been submitted by state animal health officials or an attending veterinarian. Veterinarians are encouraged to report all cases with a confirmed diagnosis of an infectious or vector borne disease, including outbreaks and cases of non-reportable diseases. This is particularly important when there is an increased risk of disease spread due to commingling of horses at equine events. The cases are then published on the EDCC website <https://equinediseasecc.org/alerts> and shared to the EDCC Facebook page. The EDCC issues alert notification emails to subscribers at the end of the day.

**Attending veterinarians or SAHOs can easily submit a case to the EDCC website at <https://equinediseasecc.org/report-a-disease>**

**The list of WOAHP reportable disease can be found at <https://www.woah.org/en/what-we-do/animal-health-and-welfare/animal-diseases/?tax=animal=terrestrials%2Cequine>, while the USDA list can be located at <https://www.aphis.usda.gov/sites/default/files/nlrad-nahrs-disease-list.pdf>**

**The Equine Disease Communication Center (EDCC) provides a list of reportable and actionable and reportable and monitored diseases in each 50 states plus Canadian Provinces on its website at <https://equinediseasecc.org/report-a-disease>.**

# Taking Precautions to Prevent Infection Transmission of EIA Virus Between Horses

By Leslie Barlow, EDCC Communications Manager

In late 2024 an equine infectious anemia (EIA) outbreak among a string of Quarter Horse racehorses in California, Texas, and New Mexico highlighted the importance of using sterilized medical equipment and injection techniques when treating horses and the need for routine testing of the virus (Figure 4).

Equine infectious anemia (EIA) is a potentially fatal blood-borne infectious viral disease that produces a persistent infection among equids nearly worldwide. It is known to be naturally spread from affected horses by certain species of biting flies which transfer the virus in blood from an infected horse.

EIA can also be transmitted iatrogenically (caused by humans through medical procedures) via medical equipment such as needles, syringes, IV tubing, or other equipment contaminated with blood or through transfusion of blood or blood products from an infected horse. Transmission from the mare to foal in utero has also been documented and the EIA virus has also been isolated from semen of infected stallions. Infection does not occur with horse-to-horse contact unless there is an exchange of blood.

The United States Department of Agriculture's Animal and Plant Health Inspection Services determined the Quarter

Horses in the care of one trainer had contracted the virus through iatrogenic transmission.

**While previously naturally transmitted by biting flies in untested or under-tested horses were the main cause of cases in the U.S., in recent years the epidemiology of transmission has shifted and now most EIA cases reported each year are now due to iatrogenic transmission of the virus in Quarter Horse racehorses.**

Many of these cases have ties to unsanctioned racing with reuse of blood contaminated equipment between horses and some of the cases have involved horses illegally moved from Mexico where the disease is widespread and endemic. Infected horses from these high-risk populations are often transported to various locations where they are in proximity with other horses where they may serve as a source of continued transmission.

The incubation period of horses infected with EIA is usually 15 to 45 days and horses that have been infected with the virus are lifelong carriers. Horses showing clinical signs of the disease are more of a threat to healthy populations because of higher levels of virus circulating in the blood.

Horses that survive the initial clinical phase of the disease usually become outwardly inapparent carriers and remain a life-long reservoir for the disease. There is no treatment or cure for EIA virus infection. Horses are usually euthanized if confirmed positive for the disease to prevent ongoing transmission to other horses. If not euthanized, horses must be permanently quarantined with separation from non-infected horses by at least 200 yards to prevent spread of the disease by biting flies. Infected horses cannot be moved from quarantined premises except by approval of state and federal animal health officials.

Clinical signs of EIA may include fever, depression, low platelet count, anemia, red or purple spots on the mucous membranes, edema, muscle weakness and atrophy, although chronically infected horses often show no obvious clinical signs of disease.

EIA is diagnosed by testing antibody levels in the blood. The most common test used is the Coggins Test, which is an agar gel immunodiffusion (AGID) test. ELISA (enzyme-linked immunosorbent assay) test is also available

*continued next page*



Figure 4: All intravenous injections need to be completed with sterile technique and equipment. Reuse of equipment or supplies when treating horses is the most common way to transmit EIA.

## Two New Veterinarians Bring Expertise and Knowledge to the EDCC

To bring more infectious disease expertise to the EDCC, Drs. Krista Estell and Katie Flynn have joined the team. The two will provide additional alert coverage and approval.



**Dr. Katie Flynn** was raised on a Standardbred racehorse farm in South Grafton, Massachusetts. She received her undergraduate degree in Animal Science from University of Massachusetts. In 2001, she received her veterinary degree from the University of Glasgow, Scotland. In 2002, Dr. Flynn began a regulatory career with the California Department of

Food and Agriculture (CDFA) Animal Health Branch (AHB) where she held several positions including a field veterinarian, livestock health program veterinarian and equine staff veterinarian. While at CDFA, Dr. Flynn participated in numerous equine disease responses including equine herpesvirus-1, equine infectious anemia, equine influenza, equine piroplasmiasis and contagious equine metritis. Dr. Flynn left California in 2020 to continue her regulatory career as the Kentucky State Veterinarian.

In March 2023, Dr. Flynn followed her equine infectious disease interest and accepted the senior staff veterinarian for equine health and biosecurity with the United States Equestrian Federation. Dr. Flynn now focuses her efforts on protecting and promoting the health of the equine athletes in the United States and abroad. Dr. Flynn is an international subject matter expert on equine biosecurity authoring the Biosecurity Toolkit which has been distributed to all 50 states and 12 countries.

"I am passionate about protecting equine health and stopping infectious disease in equine," Dr. Flynn said about joining the EDCC veterinary team. "Knowledge is power when it comes to knowing where disease outbreaks are occurring. As with that knowledge comes the ability to take proactive biosecurity measures. Thus, I believe strongly in the mission of the EDCC and felt it is important to contribute to that mission."



**Dr. Krista Estell** is a large animal internal medicine specialist with an interest in infectious disease, neonatal medicine, and oncology. She received her veterinary degree from the Virginia-Maryland College of Veterinary Medicine, completed an internship at the Equine Medical Center of Ocala, Florida and a residency in Large Animal Internal Medicine at the University of

California, Davis. Dr. Estell is currently a Clinical Associate Professor at Virginia Tech's Marion duPont Scott Equine Medical Center.

"I was excited to join the EDCC to help promote infectious disease awareness and education," said Dr. Estell. "I was the lucky resident on call at UC Davis when the Equine Herpesvirus Myeloencephalopathy outbreak happened at the Ogden, UT National Cutting Horse Show in 2011. That unforgettable experience shaped me as a veterinary internist and showed me the value of horse owner education and up-to-date information during infectious disease outbreaks. Working for the EDCC is incredibly fulfilling and I'm excited to be part of the EDCC team as it continues to grow and develop to meet the needs of veterinary practitioners and the horse community."

## Taking Precautions to Prevent Infection Transmission, *continued*

to detect EIA antibodies. Veterinarians must collect and submit blood to certified laboratories for testing.

There is no vaccine available for EIA. Methods of prevention include vector control (insect control) to reduce the possibility of transmission by biting flies and ensuring that needles, syringes, and intravenous administration sets are not reused unless sterilized. Any other medical equipment which can be contaminated with blood such as dental equipment or stomach tubes should never be shared between potentially affected horses. Sterile technique must be used when administering intravenous drugs to avoid introducing contaminated blood into a multi-dose vial of equine drugs. Blood transfusion between horses should

only be conducted by veterinarians using EIA-negative blood donor horses.

Routine EIA testing should be performed to determine if horses have contracted the virus and thereby preventing transmission of the virus to other horses. Many equine events and boarding facilities require proof of a negative Coggins Test within the previous 12 months to enter the facility. States require a negative EIA test for interstate movement and some states have an EIA test required for change of ownership.

The EDCC reports all cases submitted by state animal health officials in the United States and Canada.



## Frequently Asked Questions:

**Who can submit cases to the EDCC?** Submission of cases can only be made by veterinarians who have confirmed the diagnosis.

**Why aren't some of the cases you hear about from the media on the EDCC website?** Submitting cases to the EDCC is voluntary. EDCC seeks news of diseases in the media and attempts to get confirmed cases submitted to the website.

**Why doesn't the EDCC report a more specific outbreak location?** State animal health officials are not allowed to report an outbreak location beyond the county. Presenting a more specific location of private property or business risks liability for the premises and the EDCC. The EDCC can identify a location with permission.

**What is a reportable disease?** Each state has a list of diseases which are required to be reported by an attending veterinarian to the state veterinarian. SAHOs are encouraged to submit reportable diseases to the EDCC. Attending veterinarians are encouraged to submit reportable diseases that have been reported to or approved by the state veterinarian as well as non-reportable diseases.

## Please help support the Equine Disease Communication Center

The EDCC is an industry-driven information center which works to protect horses and the horse industry from the threat of infectious disease in North America. The center is designed to seek and report real-time information about diseases similar to how the Centers for Disease Control and Prevention Center (CDC) alerts the human population about diseases in people. The EDCC is based in Lexington, Ky., at the American Association of Equine Practitioners headquarters, with a website hosted by US Equestrian. The EDCC is funded entirely through the generosity of organizations, industry stakeholders, and horse owners.

To learn more and make a tax-deductible donation, visit [www.equinediseasecc.org/support-us](http://www.equinediseasecc.org/support-us)



4033 Iron Works Parkway | Lexington, KY 40511 | [edcc@aaep.org](mailto:edcc@aaep.org)