

Coronavirus and Equines

Basic steps should be taken
to ensure safety for humans and horses

BY AMANDA DUCKWORTH

A CLEAN ENVIRONMENT is a key step when it comes to many of the basic management principles, such as fly control, that surround the care of horses. While having a clean facility has always been important, sanitary protocols likely have never played such a large role in everyday barn life as they have in the past year as a result of the pandemic.

Keeping both humans and horses safe while also limiting the spread of disease has always been a driving factor in any well-run shedrow, barn, or breeding shed, but that was put to the test and led

to new questions during the COVID-19 outbreak.

Many have wondered whether horses can get and spread coronavirus. Horses are at risk of a coronavirus, but not COVID-19 specifically. While the types of coronavirus are different between the two species, an important factor in limiting the risks associated with both involves diligence when it comes to proper sanitation.

CORONAVIRUS IN HORSES

“Coronavirus is the overarching name for a family of viruses,” explained

the University of Missouri’s College of Veterinary Science. “There are many other coronaviruses that cause respiratory disease in humans, including SARS (severe acute respiratory syndrome) and MERS (Middle East respiratory syndrome).

“Other members of the coronavirus family are known to cause disease in domestic animals, including TGE (transmissible gastroenteritis) and PED (porcine epidemic diarrhea) in pigs; FIP (feline infectious peritonitis) in cats; and equine coronavirus infection in horses, all of which cause gastrointestinal disease. These mentioned coronaviruses are not known to be zoonotic, and therefore, humans are not at risk.”

The removal of manure and wet bedding has long been a basic tenet of equine care, both as a way to provide a clean place for the horse and to remove the breeding sites of pests, such as flies. Another benefit is it can lower the risk of equine coronavirus (ECoV), which was first identified in the early 1970s.

According to the University of Missouri, “Coronavirus infections are highly contagious, and in horses, at-risk populations include horses in breeding facilities, ranch work/farming environments, the Midwest, and draft breeds. Based on cases seen at the University of Missouri, boarding facilities are also at higher risk where there are large groups of horses.”

The Equine Disease Communication Center, which aims to protect horses



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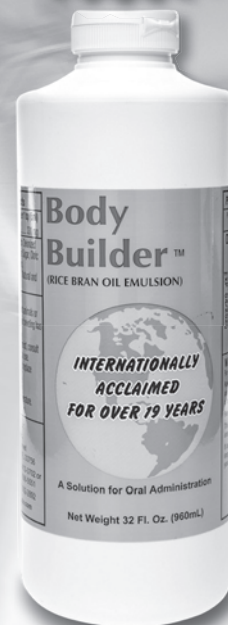
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and the horse industry from the threat of infectious diseases in North America, reports information much like the Centers for Disease Control and Prevention does for humans.

“Coronavirus is spread when feces from an infected horse is ingested by another horse,” explained the EDCC. “The virus can also be transmitted when horses make oral contact with surfaces or objects that are contaminated with infected feces. Stalls, muck forks, manure spreaders, thermometers, and clothing are common fomites (objects or materials that carry infection). Coronavirus is most commonly diagnosed in the winter months.”

The good news is, although ECoV is easily transmittable among horses, the prognosis for their recovery is good.

“It is unknown how soon infected horses become infectious, but the feces of infected horses do pose a risk to other horses,” said the EDCC. “Exposure to the virus can result in up to an 85% infection rate, but most animals do not show clinical signs. Mortality is low but can occur in complicated cases.”

Clinical symptoms can include a fever up to 105° F, lack of appetite, depression, colic, lying down frequently, diarrhea, and low white blood cell count. Complications are rare but can occur in severe cases and include protein loss, dehydration, neurologic signs, and the inability to stand.

Veterinarians can diagnose horses using polymerase chain reaction tests of a fecal sample. Treatment usually involves supportive care of the clinical signs they are presenting. More severe cases can require hospitalization.

“Any horse with a fever and no evidence of respiratory illness may have ECoV and feces may be infective,” said the EDCC. “These

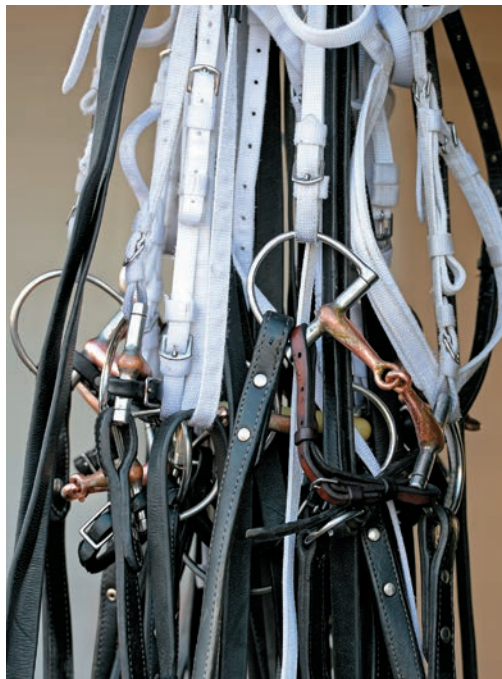
animals should be handled last when feeding, grooming, and cleaning stalls to prevent possible infection of other animals. Horses that are moved to a new facility from a facility with horses positive for the virus should be isolated for three weeks.



Using sanitizer with more than 60% alcohol is suggested after touching a horse, communal areas, or communal equipment

PHOTOS BY Z

“There is no vaccine for equine coronavirus. The best method of prevention is to maintain high standards of sanitation in all equine facilities and careful disposal of manure. When cleaning



Cleaning tack daily is recommended by the AAEP

surfaces that may be contaminated with feces, clean first to remove all traces of organic matter; then disinfect.”

CORONAVIRUS IN HUMANS

If those ideas sound familiar, it is because they are not all that different from the suggestions made by the American Association of Equine Practitioners concerning how to keep people who work in equine facilities safe during the pandemic. Of course, a key difference is that there are now human vaccines available for COVID-19.

While states continue to roll out vaccines based on availability, the recommended steps to help prevent the spread of COVID-19 in equine facilities include many things that have become part of everyday life in recent months.

Because of the welfare requirements related to tending to live animals, much of the Thoroughbred industry has been able to continue in some form or fashion throughout the pandemic. Part of that is a result of cooperating with local governments and with others within the industry to prove that the breeding, racing, and sale of Thoroughbreds could still be done safely as long as modifications were adopted.

In a statement last spring the AAEP’s board of directors explained the situation, saying: “Racehorses in a training and/or racing environment are predisposed to health emergencies and perilous behavior if their exercise routine is abruptly suspended, posing significant risks to horses and handlers.

Horses at racetracks and training centers should be allowed controlled exercise in an amount needed to maintain fitness, mental well-being, and safety while adhering to public health protocols that safeguard the welfare of those responsible for their care.”

In terms of equine facilities, the

ANNE M. EBERHARDT

PARK EQUINE HOSPITAL WELCOMES DR. MELISSA FENN AS HEAD OF INTERNAL MEDICINE

Dr. Melissa Fenn is originally from Tucson, Ariz., but spent most of her childhood living in South America with her family. She received her bachelor's degree with honors from the University of Arizona and then went on to graduate from Cornell University with a Doctor of Veterinary Medicine degree. Following veterinary school, she completed a rotating internship at the Mid-Atlantic Equine Medical Center before returning to Cornell for a three-year residency in Large Animal Internal Medicine. After the residency and obtaining her board certification with the American College of Veterinary Internal Medicine in 2019, she moved to Doha Qatar. Here she spent a year working at a busy referral hospital, the Equine Veterinary Medical Center, providing specialized clinical services to the horses of Qatar, as well as teaching and research opportunities.

Growing up and working in developing nations exposed Fenn to a unique set of international health issues affecting the interactions among the environment, animals, and humans. Having become in-

trigued by the mechanisms of infectious diseases manifested in animal populations and their detrimental effects on human health she expanded upon these interests throughout her veterinary clinical education. She learned to use comparative approaches to investigate disease pathogenesis further and to hone the skills required to integrate and interpret medical knowledge, from multiple sources, across a wide range of species. This international and interdisciplinary approach has provided a valuable perspective on her career in equine internal medicine. Fenn's clinical areas of interest include emergency and critical care, neurology, and neonatology. These interests have translated over to her primary research focus on transfusion medicine.

Fenn is currently heading the internal medicine department at Park Equine Hospital. She and her team offer a large range of state-of-the-art diagnostic equipment to ensure a complete and thorough evaluation of a horse's health. The facility also has a

dedicated isolation unit that uses strict protocols to minimize the risk of exposure of infectious diseases to other patients. The internal medicine service specializes in the diagnosis and treatment of a variety of conditions that affect both neonatal and adult horses. These include—but are not limited to—disorders of the respiratory, gastrointestinal, cardiovascular, urinary, ophthalmological, and central nervous system.

It is the goal of the internal medicine service at Park Equine Hospital to provide exceptional clinical services through the hospital's full-service capabilities, with an emphasis on comprehensive care for the whole horse. Fenn and the team have a commitment to excellence in both the quality of medicine provided to patients and the quality of relationships fostered with clients and the community. They believe service is the cornerstone of the hospital's mission, and the energy expended going the extra mile is what will define this commitment to clients and their animals. These values are the centerpiece of positive outcomes and it is Park Equine Hospital's vision to continue to uphold them.



Dr. Melissa Fenn



AAEP recommends access should be restricted to essential personnel such as veterinarians, farriers, grooms, and trainers. Those allowed on site should maintain six feet of separation and refrain from congregating. Finally, anyone who has symptoms or has been exposed to a person with symptoms of COVID-19 should not be allowed onto the grounds until properly tested.

As far as those who are allowed in an equine facility, some basic steps should also be taken to ensure safety. They include touching only required items and avoiding the sharing of equipment and supplies between people.

"The virus can persist on non-porous

materials (leather bridles/saddles/halters, nylon halters/lead ropes, gate latches, door handles, spray nozzles) longer than porous materials (cotton lead ropes, saddle pads)," explained the AAEP. "Although there is no evidence that horses can contract or become ill from COVID-19, practice good hygiene by washing your hands with soap and water for a minimum of 20 seconds or using a >60% alcohol hand sanitizer after touching a horse, communal areas, or communal equipment to prevent environmental spread of the virus. Hand sanitizer is not as effective as soap and water, so only use when there is no soap and water available and hands

are not visibly soiled."

Specific other steps recommended by the AAEP include cleaning communal leather tack daily with tack cleaner; disinfecting gate latches, spray nozzles, cross-tie snaps, pitchforks, wheelbarrows, and other frequently used non-porous surfaces regularly or after contact with personnel; stall door handles, hose ends, light switches, and feed scoops handled by many people should also be cleaned and disinfected frequently; and prohibit the shared use of grooming supplies, helmets, and tack as these could be sources of environmental transmission of COVID-19 to other humans.

The United States Environmental

Protection Agency provides a list on its website about which disinfectants to use for COVID-19, including information on how to handle some of the tougher surfaces that equestrians might come in contact with.

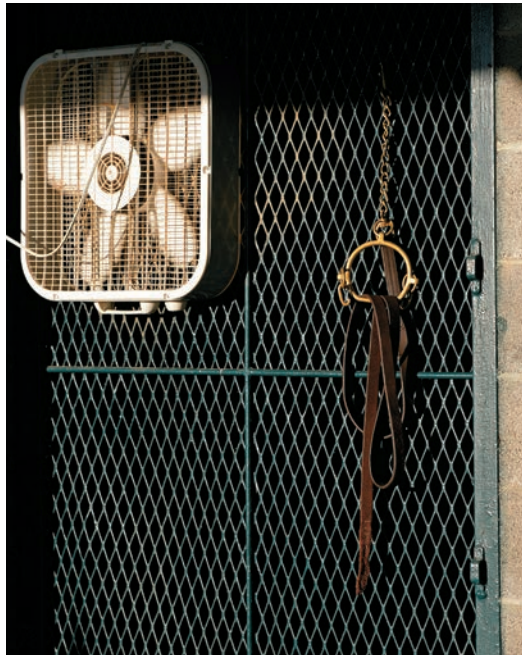
However, these approved disinfectants are not for leather. It is important when using disinfectants to make sure they are capable of doing the necessary job and that they are used properly around animals.

One thing that works in the horse industry's favor is that the CDC currently recommends that outdoor areas generally require only normal routine cleaning, while noting protecting workers is still vital to keeping everyone safe. In addition to wearing a mask, staying six feet apart, and avoiding crowds, the CDC advises the best way forward is to have a clear protocol for employees to follow when it comes to sanitation expectations and the use of personal protective equipment.

"Spraying disinfectants in outdoor areas, such as sidewalks, roads, and groundcover, is not an efficient use of supplies and is not proven to reduce risk of COVID-19," said the CDC. "High-touch surfaces made of plastic or metal, such as grab bars, play structures, and railings should be cleaned routinely. The targeted use of disinfectants can be done effectively, efficiently, and safely on outdoor hard surfaces and objects frequently touched by multiple people.

"Develop policies for worker protection and provide training to all cleaning staff on site prior to providing cleaning tasks. Training should include when to use PPE, what PPE is necessary, how to properly don (put on), use, and doff (take off) PPE, and how to properly dispose of PPE."

When it comes to governmental regulations concerning PPE and capacity at events, things can vary significantly from state to state.



Gate latches and other barn equipment are items that should be cleaned to lessen the spread of COVID-19 or other viruses

Additionally, each facility might have more stringent requirements to be on site than what is mandated by the state. It is important to research what the current expectations are for each location.



Wearing a mask and maintaining social distancing remain important components in stopping the spread of COVID-19

MOVING FORWARD

A year into the pandemic there is no "one size fits all" solution for every type of equestrian facility, be it a racetrack, veterinary clinic, breeding farm, or sales company. As facilities that were on tighter restrictions begin opening back up to the public, it is important to do so as safely as possible.

Last summer Dr. Jackie Christakos penned the paper "Ethics in the Time of COVID-19" and considered pandemic-related issues faced by veterinarians, but the overarching concept applies to the equestrian world at large. Christakos is a member of the AAEP's Member Engagement and Professional Conduct & Ethics committees.

"Decisions must be made on a day-to-day, case-by-case, community-by-community basis," Christakos wrote. "Government mandates and overall risk may be variable, even between neighboring counties. However, this strange time in history has forced us to ask ourselves if we are choosing from a position of self-interest or for the greater good of our fellow humans. How we perform our daily work may literally be the difference between life and death—for our equine patients as always but now also for the humans who care for them. The gravity of our decisions is greater than ever."

The National Horsemen's Benevolent and Protective Association has created a webpage for anyone with questions about best practices for safely maintaining an equine facility and many of the other facets that are part of living through a pandemic while also caring for horses. It provides an extensive list of resources, links, and information pertinent to the equine industry as it pertains to COVID-19. The list was compiled by the American Horse Council. **BH**

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