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Contagious Equine Metritis

Last Modified:

Contagious equine metritis (CEM) is a venereal disease of horses caused by the bacteria *Taylorella equigenitalis*. It can impact fertility in both mares and stallions. The United States is considered to be CEM-free. Therefore, CEM is a foreign animal disease that is reportable at both the Federal and State level. The U.S. horse industry could suffer significant economic losses if the disease became established here.

CEM is spread during breeding or through contact with contaminated objects. It is highly contagious among horses and can be difficult to detect and control. Signs of illness in infected mares may not be obvious, and stallions carry the bacteria without showing any signs at all. In some cases, mares may also become carriers. Foals born to infected/carrier mares can also become long-term carriers of the bacteria.

What To Look For

Stallions show no signs of infection and become disease carriers. Mares typically clear infection without treatment but can also become carriers.

In mares, symptoms usually appear 10–14 days after infection and include:

- Vaginal discharge (in up to 40 percent of affected mares)
- Infertility
- Abortion

How To Prevent This Disease

CEM can be transmitted by an infected horse during breeding; through artificial insemination with contaminated semen; or by contact with contaminated objects, such as hands or instruments. It can also be spread during the semen collection process. There is no vaccine.

Import Restrictions for Horses

To keep this disease out of the United States, USDA requires stallions and mares imported from CEM-affected countries to quarantine and test negative for CEM before they can enter the country. Learn more about U.S. import restrictions for horses.

Biosecurity Precautions During Breeding

As a horse owner or breeder, here's what you can do to prevent the spread of CEM:

- Test stallions annually for *T. equigenitalis* before each breeding season.

- Maintain accurate and up-to-date breeding records, including breeding date and stallion used, to quickly identify infection source and limit disease spread.
- If your mares are having reproductive problems or have symptoms of contagious equine metritis, contact your veterinarian.
- Always clean and disinfect semen collection equipment between stallions.

How It Is Treated

Animal health officials investigate each detection to identify, test, and treat all infected or exposed horses. Affected horses are quarantined and treated with antimicrobials to eliminate *T. equigenitalis.* They are retested and not cleared for release from quarantine until results are negative. After treatment, fertility appears to return to normal in recovered horses.

Treatment is performed in quarantine under the supervision of regulatory animal health officials. Personnel thoroughly wash the external genitalia in stallions and mares using a disinfectant soap (for example, 2% Chlorhexidine). After thoroughly rinsing the area, they apply a topical antibiotic (for example, nitrofurazone or silver sulfadiazine). Steps need to be repeated for 5 consecutive days. Most horses respond very well to one 5-day treatment; however, some may need to be retreated.

Report Signs of Animal Disease

Producers or owners who suspect an animal disease should contact their veterinarian to evaluate the animal or herd. Find an accredited veterinarian.

Animal health professionals (veterinarians; diagnostic laboratories; public health, zoo, or wildlife personnel; and others) report diagnosed or suspected cases of nationally listed reportable animal diseases to APHIS Area Veterinarians in Charge and to the State animal health official as applicable under State reporting regulations.

Controlling Contagious Equine Metritis

Expand All

Confirmed CEM Cases in the United States

CEM has been detected sporadically in the United States, most recently in 2024. USDA oversees quarantine, testing, and treatment programs for CEM. We have eradicated the disease from the U.S. equine population after each previous detection and are responding to the current incident.

May 2024 (ongoing)

Case Count as of 4/4/2025: Total of 53 cases, including 18 domestic ponies (2 stallions, 1 mare, 15 geldings), 19 riding horses of various breeds (all geldings), and 16 draft horses (all geldings) confirmed *Taylorella equigenitalis*-positive and connected to a single farm in Orange County, Florida. Forty-one (41) of the positive horses are located on the index farm in Florida and 12 positive geldings are trace outs from the index farm which have been quarantined on 6 other farms in Florida, 1 farm in Iowa, 1 farm in Maine, 1 farm in Maryland, 1 farm in North Carolina, and 1 farm in South Carolina.

On May 23, 2024, the National Veterinary Services Laboratories (NVSL) in Ames, Iowa, reported confirmation by bacterial culture a positive case of *Taylorella equigenitalis*, the causative agent of contagious equine metritis (CEM), in an 11-year-old domestic pony mare in central Florida. The mare had been bred by live cover on May 10th to a 3-year-old pony stallion. After breeding, the mare had retained free fluid in her uterus and was treated by uterine lavage on May 13th. The uterine fluid was collected and sent for routine bacterial culture, which ultimately yielded the confirmed positive results for *T. equigenitalis*.

On May 31, 2024, NVSL confirmed the 3-year-old pony stallion positive for *T. equigenitalis* on bacterial culture. Banked serum samples were used to conduct pre- and post-exposure complement fixation testing (CFT) on the positive pony mare which confirm the pony stallion as the source of her infection.

On June 12, 2024, NVSL confirmed a 6-year-old pony stallion on the index premises in Florida as positive for *T. equigenitalis* by bacterial culture. This stallion and the first positive stallion were collected using shared semen collection equipment one

day apart in May 2024.

On June 27, 2024, NVSL confirmed a 6-year-old pony gelding on the index premises in Florida as positive for *T. equigenitalis* by bacterial culture. The gelding is the turn-out companion of the 3-year-old infected pony stallion and was likely exposed through routine sheath cleaning practices on the farm.

On July 25th, July 31st, August 14th, and September 18th, 2024, NVSL confirmed a total of 12 more pony geldings of various ages from the index premises in Florida as positive for *T. equigenitalis* by bacterial culture. Given the significant involvement of sheath cleaning practices as the method of spread among the pony geldings on the index farm, all remaining horses on the farm, 39 riding horses and 22 draft horses, which are all geldings, were tested.

On August 15th, August 27th, and September 27th, 2024, NVSL reported confirmation of *T. equigenitalis*-infection in an additional 25 of the horses on the index farm (13 riding geldings and 12 draft geldings of various ages and breeds).

Status of testing and treatment on the index farm: There are 96 equids (35 ponies, 39 riding horses, 22 draft horses) on the index farm. Twenty-six (26) riding geldings, 10 draft geldings, and 5 pony geldings completed at least 3 sets of direct swab samples with all negative results. Twelve (12) pony mares completed testing with all negative results and the previously infected mare was treated and retested negative. The two remaining exposed pony stallions completed testing with all negative results. All horses on the index premises completed testing and were categorized as either positive (41 horses) or negative (55 horses). All 41 positive horses have completed treatment; 40 horses have been retested negative and released from quarantine.

Trace Outs: A veterinary hospital in Florida participated in collection and handling of one of the infected pony stallions from 2022-2024. The hospital's resident stallion was identified as potentially exposed through shared semen collection equipment; he has completed testing with all negative results and been released from quarantine. A client stallion collected by the hospital using equipment shared with the infected pony stallion in 2022 and 2024 was also identified as potentially exposed; he has completed testing with all negative results and been released from quarantine.

Trace out information was obtained for all horses potentially exposed that left the index premises in Florida from 2022 to 2024. A total of 18 horses (all geldings) were located and quarantined for testing in 8 states (Florida, Georgia, Illinois, Iowa, Maine, Maryland, Michigan, and North Carolina). On September 18th, 19th, 25th, 27th, October 4th, 7th, and November 4th, 2024, NVSL reported confirmation of *T. equigenitalis*-infection in 8 of the trace out horses: 2 geldings (1 pony, 1 draft) on a farm in Lake County, Florida, 1 gelding (riding horse) on a separate farm in Lake County, Florida, 1 gelding (riding horse) on a farm in Orange County, Florida, 1 gelding (draft horse) on a farm in Black Hawk County, Iowa, 1 gelding (draft horse) on a farm in York County, Maine, 1 gelding (riding horse) on a farm in St. Mary's County, Maryland, and 1 gelding (riding horse) on a farm in Alamance County, North Carolina. Testing of trace outs from 2022-2024 has been completed and 7 of the 8 positive trace geldings have completed treatment and retested negative.

CEM-positive trace out geldings were identified which left the index farm in Florida in 2022, so testing of trace outs from previous years was determined to be necessary. Trace out information was obtained for all horses potentially exposed that left the index farm in Florida from 2018 through 2021. A total of 19 horses (18 geldings, 1 mare) were identified as potentially exposed in this time frame. Eighteen (18) of these trace outs were located and quarantined for testing in 4 states (Florida, North Carolina, South Carolina, and Virginia); 1 trace gelding was unable to be located and is classified as untraceable. Fifteen (15) of the trace outs completed testing with all negative results. On December 4, 2024, January 22, 2025, and March 6, 2025, NVSL reported confirmation of *T. equigenitalis*-positive results on 3 trace outs from this group: a draft gelding located in Colleton County, South Carolina, a riding gelding located in Alachua County, Florida, and a pony gelding located in Lake County, Florida. These three positive traces are in the process of being treated and retested.

Additional trace out information has been obtained for all horses potentially exposed that left the index premises in Florida since 2017, including some horses not previously identified that left the farm in 2018. Of the 17 trace outs in this time frame, a total of 6 horses are reported to be alive and are being located for testing in 5 states (Florida, Georgia, Iowa, Kentucky, and Pennsylvania). On April 3, 2025, NVSL reported confirmation of *T. equigenitalis*-positive results by bacterial culture on 1 of the trace out riding geldings from this group located in Pasco County, Florida. This gelding left the index farm in Florida in November 2017 and is the longest-

infected trace out identified to date. Testing of the remaining exposed trace out horses from 2017 to 2021 is ongoing.

Traceback investigation: The first positive pony stallion was traced back to a farm of origin in Polk County, Missouri, where he was foaled in 2021 and remained until August 2023. His dam, a pony mare, was the only potentially exposed horse on the premises and completed testing with all negative results. The second positive pony stallion was traced back to a farm of origin in Gallatin County, Kentucky, where he was born into an owned, but essentially feral herd of about a dozen domestic ponies and donkeys which were dispersed in 2022. Results of the epidemiologic investigation to date indicate that neither infected pony stallion was the source of infection. The oldest positive gelding trace left the index farm in November 2017, which confirms infection to have been present on the Florida index farm since at least prior to that date. Traceback will be conducted for each infected gelding that could have served as a potential source of the infection prior to November 2017.

Genomic sequencing: Genomic sequencing of the *Taylorella equigenitalis* isolates from this incident have indicated close correlation between the infected horses on the index farm in Florida. The isolates do not match any *T. equigenitalis* isolates from previous U.S. outbreaks. The current isolates fall within the same clade as two previously obtained international isolates, but they are not closely related.

The epidemiological investigation into this outbreak is ongoing and additional updates will be posted as they become available.

The first cases of CEM were diagnosed in the 1970s, beginning in England and then in other countries in Europe and the United States. Due to the nature of CEM, it is difficult to determine how widely it is distributed throughout the world. USDA considers Japan, South Africa, Korea, all European Union countries, and many other countries in Europe (including Great Britain and Northern Ireland) to be affected with the disease. Visit the World Organisation for Animal Health for the latest information on CEM reporting around the world.

Testing

Veterinarians work with State or Federal animal health officials to test any horse suspected of having CEM or any horse exposed to a CEM-positive animal. You may also need to test for CEM to meet requirements for exporting horses, semen, or embryos to another country or as part of a routine breeding soundness examination. There are three ways to test for CEM: bacterial culture, blood testing, and test breeding.

Bacterial culture tests look for the bacteria that cause CEM. Veterinarians collect swabs and send them to approved laboratories. They require special handling and must be processed within 48 hours of collection. It takes 7 days to get a result. Typically, the veterinarians will collect three sets of swabs for culturing during a 7- to 12-day period.

Blood testing looks for an immune response to CEM, which helps determine if a horse has recently been exposed to the disease. This complement fixation test can only be used in mares because stallions do not develop an immune response to CEM.

Test breeding is used to detect CEM in stallions under certain circumstances. A stallion is bred to two mares known to be CEM-free. Those mares are then tested for CEM. It takes 5 weeks after the test breeding and multiple tests on the mares to declare the stallion negative. Test breeding will sometimes detect bacteria that direct testing of the stallion did not detect. To maximize the chances of detecting the bacteria, USDA requires stallions to be tested by both bacterial culture and test breeding if they are known to have been exposed to the CEM bacteria or are being imported to the United States from a CEM-affected country. Test breeding is not normally required to export stallions or semen to another country. Mares are tested with bacterial culture and blood tests.

Recommended Sources for More Information

- Contagious Equine Metritis (430.44 KB) (APHIS factsheet)
- WOAH: Contagious Equine Metritis (World Organisation for Animal Health)

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