



Coronavirus

Disease Name: Equine Coronavirus, ECoV-

Disease Type: Viral (RNA virus)

Transmission: Coronavirus is spread when feces from an infected horse is ingested by another horse (fecal-oral transmission). 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, hands, and clothing are common fomites (objects or materials that carry infection). Coronavirus is most commonly diagnosed in the winter months.

Frequency: Low

Incubation period: 2-4 days

Carrier status: Carrier status is currently unknown but subclinical horses (horses with no clinical signs) have been found to shed the virus.

Shedding period: Shedding period for most horses is unknown (still under investigation), but based on existing reports, the virus has been found to be present in samples 5-21 days post infection. Horses with no clinical signs of the disease can shed the virus. It is unknown how soon infected horses become infectious, but the feces of infected horses does pose a risk to other horses.

Severity: Mild but mortality does occur in complicated cases. Miniature horses seem to be more severely affected than other breeds/types.

Clinical signs and symptoms:

- Fever up to 105° F (40.5° C)
- Lack of appetite
- Depression
- Colic
- Laying down frequently
- Diarrhea (may or may not be present)
- Low white blood cell count

Complications can occur in rare cases:

- Protein loss
- Dehydration
- Neurologic signs (such as lethargy, depression, loss of body control) secondary to an excess of ammonia in the system
- Recumbency that can progress to an inability to stand
- Death

Equine Disease Communication Center: Disease Factsheet

Diagnoses: Diagnosis is made by a veterinarian submitting samples for PCR (polymerase chain reaction) tests of a fecal sample.

Treatment: The primary treatment is supportive care based on the clinical signs. Severe cases may require hospitalization for IV fluid treatment or treatment for secondary infections.

Prognosis: Good. Exposure to the virus can result in up to 85% infection rate but most animals do not show clinical signs. Mortality is low but can occur in complicated cases.

Prevention: There is no vaccine to protect horses from Equine Coronavirus infection. The best method of prevention is to maintain high standards of sanitation in all equine facilities and carefully disposing of manure where it cannot contaminate pastures, paddocks or drinking water. When cleaning surfaces that may be contaminated with feces, clean the surface first to remove all traces of organic matter, then disinfect.

Biosecurity: Any horse with a fever and no evidence of respiratory illness may have ECoV and feces may be infective. These animals should be isolated by handling them 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 3 weeks. Feces can be checked prior to removing horses from isolation.