

Fluxergy PCR Testing



What is PCR Testing?

PCR (Polymerase Chain Reaction) testing is a highly sensitive and specific diagnostic method that detects the genetic material of infectious organisms. This technology allows us to identify infections earlier and more accurately than many traditional testing methods—resulting in faster answers, more informed decision-making, and improved patient care.

Increased Relevance During Recent EHV-1 Activity

Recent EHV-1 outbreaks highlight the importance of early detection and rapid response. EHV-1 is highly contagious and can spread quickly through barns, particularly when horses travel or commingle. Prompt identification of infected or exposed horses is critical for limiting transmission and protecting both individual horses and entire facilities.

Our ability to perform **same-day, in-house PCR testing** allows us to:

- Rapidly evaluate horses with fever, nasal discharge, or neurologic signs
- Screen exposed horses sooner following a known or suspected exposure
- Make timely decisions regarding isolation, movement restrictions, and enhanced biosecurity

Tests We Currently Offer In-House

Using the Fluxergy system, we can perform PCR testing for:

- **Strangles** (*Streptococcus equi equi*)
- **Equine Herpesvirus** (EHV-1 and EHV-4 / Rhinopneumonitis)
- **Equine Influenza** (EIV)
- **Salmonella**

Why In-House PCR Testing Matters

Having PCR testing available on-site provides several important advantages:

- **Rapid turnaround times:** Most PCR results are available in under one hour, compared to the typical 3–5 days required when samples are sent to an outside laboratory.
Note: Salmonella samples require a 16–24 hour incubation period prior to testing.
- **Earlier detection:** Faster identification allows for earlier treatment and containment measures.

- **Improved biosecurity:** Supports screening of new or returning horses, monitoring of exposed populations, and effective outbreak management.

Herd Screening & Sample Pooling

In appropriate situations, **PCR sample pooling** may be a practical and cost-effective option for barn-level surveillance. Pooling involves combining samples from multiple horses and testing them together. A negative pooled result suggests all horses in that group are negative, while a positive result allows for targeted individual testing.

Sample pooling may be particularly beneficial for:

- Screening new arrivals
- Monitoring groups after travel, shows, or sales
- Ongoing surveillance during periods of increased disease activity, such as current EHV-1 concerns

EHV-1 & EHM: Frequently Asked Questions

What is EHV-1?

EHV-1 is a contagious equine herpesvirus that can cause respiratory illness, abortion in pregnant mares, and neurologic disease. Many horses carry herpesvirus latently and may shed the virus during times of stress.

What is EHM?

Equine Herpesvirus Myeloencephalopathy (EHM) is the neurologic form of EHV-1 infection. It occurs when the virus affects the blood vessels of the spinal cord and brain, leading to inflammation and neurologic dysfunction. While not all EHV-1 infections progress to EHM, cases can be severe and require immediate veterinary attention.

What clinical signs should I watch for?

- Fever (often the earliest sign)
- Nasal discharge or cough
- Lethargy or decreased appetite
- Incoordination, weakness, difficulty standing, or urine dribbling (neurologic signs consistent with EHM)

When should PCR testing be considered?

- Any horse with a fever or neurologic signs
- Horses exposed to a confirmed or suspected EHV-1 case
- New arrivals or horses returning from travel or competition
- As part of proactive barn biosecurity screening during outbreaks

How does rapid PCR testing help?

Rapid, in-house PCR testing allows for earlier diagnosis, faster isolation of positive horses, and timely implementation of biosecurity measures—key steps in reducing spread and protecting other horses.

Supporting Your Horse's Health

Early detection of infectious disease plays a critical role in protecting individual horses and entire facilities. Rapid, reliable PCR testing allows us to implement appropriate treatment, isolation, and biosecurity protocols as efficiently as possible—particularly during times of increased infectious disease risk.

If you have questions about PCR testing, sample pooling, or EHV-1 biosecurity planning, please do not hesitate to contact us. Our team is happy to help you develop a proactive, practical health management plan tailored to your horse or facility.