

# Potentially deadly horse virus contained

UW-RF expert credits awareness, fast response

BY CHUCK NOWLEN  
cnowlen@rivertowns.net

An outbreak of the potentially deadly Equine Herpes Virus threw a scare into the local horse community early this year but was contained by quick action on well-established response protocols, according to a UW-River Falls expert.

"It's one of those things where you have to be ever-vigilant," Animal Health Professor Peter Rayne said in an interview last week.

"So there was a lot of interest and awareness once the initial cases were diagnosed... There have been no cases in the state since late-March, when the last positive horse was identified in Wisconsin."

At least 10 horses were infected with Equine Herpes Virus in Wisconsin, Minnesota and Iowa in March and April, including one in St. Croix County and two others in Polk and Lafayette counties, according to several reports. One report also listed an infection in Burnett County.

A second, "highly suspicious" case occurred in St. Croix County in February, and the animal was euthanized, according to another source. That case reportedly involved



UW-River Falls Animal Health Professor Peter Rayne is shown with Tonka at the university's Campus Laboratory Farm. (River Falls Journal photo by Chuck Nowlen)

the same farm where Equine Herpes Virus was later confirmed in March.

The highly contagious virus, which remains dormant in infected animals after exposure but can revive during periods of stress, can cause neurological, urinary and respiratory problems, neonatal death and abortion.

## VIRUS EXPLAINED

The virus is spread by horse-to-horse contact but also through tack, grooming equipment or feed and water buckets, for example. It is not

harmful to humans but can be passed to horses by people's hands or clothing.

Rayne noted that there are two strains of Equine Herpes Virus, or EHV-1: the deadly Strain D, which "has a very high propensity to create neurological problems;" and a milder Strain E, which "is not as virulent but still can cause problems."

Strain D was not confirmed in any of the Wisconsin cases, he said.

Rayne added that horses can be especially vulnerable to

EHV-1 in the spring and fall due to seasonal weather changes and transportation stress when they are taken to industry shows and exhibitions, for example.

"It's a herpes virus, and one characteristic of that virus is that once an animal is infected, the virus becomes latent, and then, during a period of stress, it can come out again," he said. "At that point, the animal will shed the virus, so it can be transmitted through nose-to-nose contact and through other means."

Typically, the onset of EHV-1 is marked by a mild fever that goes away after four or five days, followed by a more prolonged fever and symptoms that tend to appear eight to 10 days later. EHV-1 can be positively diagnosed via a nasal swab and a detection test.

"The key is early detection and treatment," Rayne explained.

Follow-up treatment includes quarantine and restricted movement, anti-inflammatory drugs and general supportive care. In cases where neurological problems are present, animals may have to be kept in padded stalls and special slings may have to be used to help them stand.

## FAST RESPONSE

Rayne credited widespread awareness of the disease's potential, effective industry-wide communication — now boosted by social media — and established treatment and prevention protocols with keeping the 2014 outbreak from getting out of hand.

"The industry knows that EHV-1 is endemic in the horse population and that we'll see an outbreak from time to time, so it's in everybody's best interest to keep a level of vigilance," he said.

"If you're in the horse industry, you've got a fairly high investment — the average owner spends something like \$5,000 a year for each horse... So people are careful,

and because of the availability of social media, you can spread the word that much more quickly."

There is a strong EHV-1 presence on Facebook and other social media, and word of this year's outbreak and response procedures passed quickly via other channels through industry associations; U.S., state and local government agencies; and media outlets, Rayne added.

Access to the UW-River Falls Campus Laboratory Farms, where "about 100" horses were kept this spring, was limited immediately after this year's cases were reported, he noted.

Local horse owners also were alerted about precautionary measures, which include temperature monitoring, disinfectants and close vigilance over water and feed supplies, stall areas and keepers' boots, clothing and equipment.

In the wake of this year's outbreak, some exhibitors stayed away from April's Midwest Horse Fair in Madison, and organizers put up signs about EHV-1 in barns and other facilities, while also making hand sanitizers widely available on the grounds.

Horse access was also limited and similar precautions were taken at the Minnesota Horse Expo at the state fairgrounds later in the month.