



Potomac Fever

This disease is not present in Australia at this time.

Potomac Horse Fever is a serious illness of horses that was first described in the area around the Potomac River in Maryland in 1979. The disease is now recognized throughout the United States as well as in other countries. It is caused by a type of tiny bacteria, *Neorickettsia risticii*.

Previously, the horse's organism was called *Ehrlichia risticii*, so the disease in horses is also known as Equine Monocytic Ehrlichiosis.

After the organism is ingested, it multiplies in the intestinal tract, where it can cause marked inflammation (colitis). This leads to the clinical signs of fever, depression, poor appetite, and in most cases, diarrhea. A subset of horses will founder and pregnant mares can abort. Some will also develop swelling of their lower limbs or body wall.

Not all horses exposed to the PHF organism become ill. This disease can kill affected horses, but most respond well, if treated early.

Currently, the most important transmission route is believed to be immature flukes which are ingested by a variety of aquatic insects. The larval stages of the insects then molt into flying insects, carrying the immature fluke and PHF organisms into the horse's environment. The horse then becomes infected when it eats or drinks anything contaminated with these insects.

Aquatic insects are attracted to lights at night. Anecdotal reports suggest that horses in stalls near night lights may be at greater risk of developing clinical signs. The insects fly towards the lights, and may die there in large numbers, getting into the horse's feed, bedding or water. In one confirmed cluster of 4 cases in Minnesota this summer, thousands of dead mayflies were observed outside the barn, and some got into the affected horses' hay and stalls.

Research using molecular techniques has shown that there are many different strains of the PHF

organism that can be isolated from sick horses from different areas.

Vaccine-induced immunity diminishes the severity of disease if the horse is exposed to the Organisms, but if infected, the vaccinated horse can still become ill, and may die.

The vaccine does NOT produce very high blood antibody levels, whereas natural infection produces very high titres which protect the horse for several years.

When a PHF vaccine is used for the first time, the horse must receive a booster in 2-4 weeks. After that, annual vaccination is recommended if the horse lives in a high risk environment. In years where a high number of cases are observed, veterinarians may suggest a late summer booster as well.

Clusters of horses affected with Potomac Horse Fever are rare, but when observed, are most often in stables near waterways.



Horse foundered from Potomac Fever