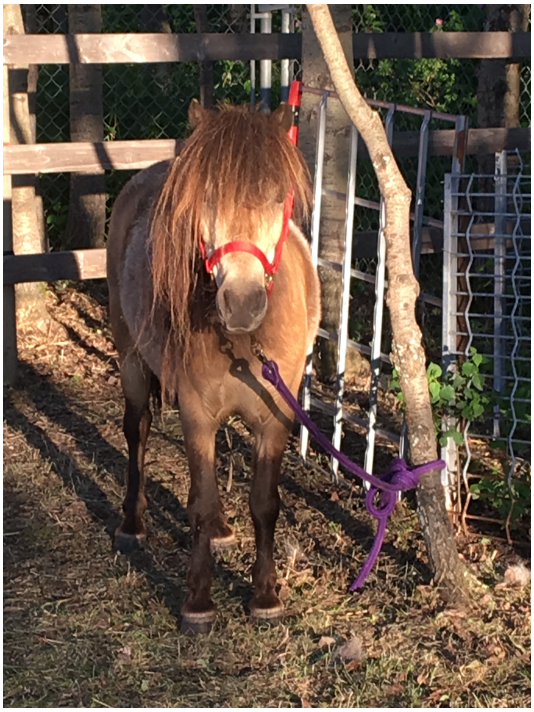
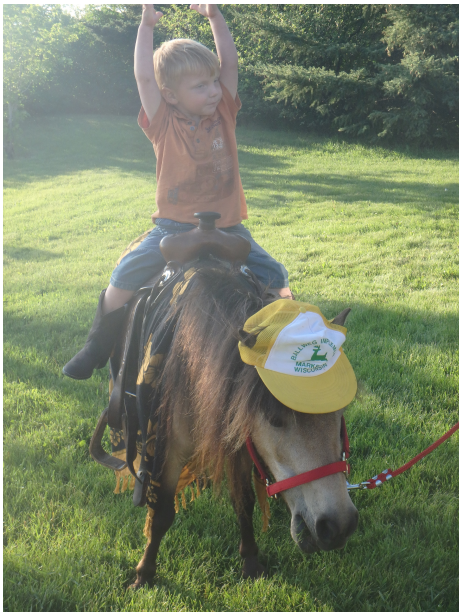


West Nile is a disease caused by a virus(WNV). In the equine population it is transmitted when a mosquito takes a blood meal from a bird infected with WNV, then feeds on a horse. The virus can cause encephalitis (inflammation of the brain and spinal cord) that can affect humans and other animals as well as horses. Horses and humans are considered to be dead end hosts and therefore do not contribute to the transmission cycle. The virus is not directly contagious from horse to horse or horse to human. Even highly infected horses are unlikely to cause indirect transmission via mosquitos because horses have negligible amounts of virus circulating in their blood.

Infection with WNV does not always cause signs of clinical abnormality. Many infected animals show no signs of illness even though they produce detectable blood antibody levels. While in others, it can cause encephalitis, sometimes leading to fatal results. Clinical signs can vary in range and severity. Those most frequently observed include incoordination or ataxia (especially of the hind limbs), twitching of the muzzle and twitching of the muscles in the neck, shoulders and pectoral region. Signs may be bilateral or unilateral. Also reported are behavioural abnormalities (e.g. depression, heightened sensitivity to external stimuli, stumbling, toe dragging, leaning to one side and in severe cases paralysis of the hindquarters, recumbency, coma and death. Other clinical signs that may be noted include fever, generalized weakness, impaired vision, inability to swallow, aimless wandering and convulsions. The nature and severity of clinical signs depend largely on the area of the central nervous system affected by the virus and the extent of the damage. As these symptoms are not specific for WNV, tests need to be preformed to diagnose it specifically. When there is an undiagnosed neurologic case the veterinarians have to treat it as a possible rabies case. As we were trying to help Wildfire, in his downed state there was a point where he reached out and bit me. The bite was low on my leg but it did break my skin. This led to a potential rabies scare for me until tests results were back.



In August of 1999 West Nile was identified in the North Eastern states of U.S.A. Since then it has spread dramatically across U.S.A. and Canada with an estimated 30-40% fatality rate in horses. West Nile Virus is now considered to be endemic in all areas of North America. Risk of exposure and geographic distribution varies from year to year. Because of the unpredictable nature of factors and effects of the disease it is recommended that <u>all</u> horses in North America be immunized against West Nile.

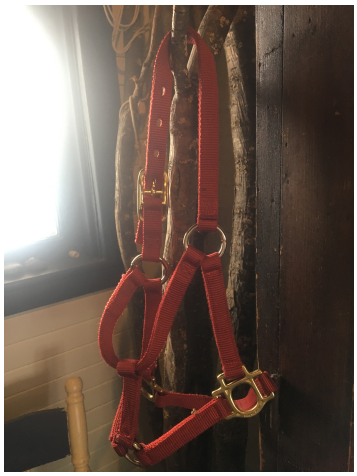
For example in our particular area there had not been a documented positive case for approximately 7 years. Many have thought West Nile to no longer be a threat. A chart

on Alberta Ag's website, shows the unpredictability of the disease with confirmed positives going from 170 in 2003, to 1 in the years 2008 -2011. You can find another link, split based on region at health.alberta.ca. You can look up stats for any province or just talk to your local vet. Remember though, just because there has not been a reported case in your area doesn't mean it's not out there. Talk to your vet about the most appropriate vaccine and vaccination schedule for your area. Horses vaccinated against Eastern, Western or Venezuelan encephalomyelitis are not protected against WNV.

The incubation period in a horse appears to be 3 to 15 days. In our case with Wildfire it was the end of the season mosquitos that carried the disease. Wildfire passed away October 6 2017.

There is no specific treatment for West Nile. Treatment is aimed at symptomatic and supportive care for the encephalitis and the neurological abnormalities that it produces. The nature and severity of clinical signs depend largely on the area(s) of the central nervous system affected by the virus and the extent of damage. The incidence of disease tends to be greater in older horses where a favourable clinical outcome is less likely. Data has supported that 40% of horses that survive the acute illness caused by WNV exhibit residual effects , such as gait and behavioural abnormalities that were attributed to the illness by owners, 6 months following diagnose.

We raise Fjords and love everything about them, but somehow in the last few years with 8 small grandchildren, all within the age of 5 years of each other, our miniature Wildfire became our special man. He would put his head down for the children to halter him. He loved kids more than he loved his pasture mates. He was the star of our family July 1st parade. He was led around by many a kindergarten child. He was the star at our local petting zoo at the fair. He was even borrowed to be enjoyed by grandchildren of our friends. Nothing phased this little man. The impact of losing him and the circumstances around it is huge in our lives. I know that the measures we took to try save him and in doing so got WNV diagnosed was because he was our favourite. Our one small peace of mind is that WNV took our favourite so that we can let you know its out there and save yours. Talk to your vet about vaccinating for WNV



WNV information obtained from Lloydminster Animal Hospital