## Fact Sheet Queensland Horse Council Inc.

## **West Nile Fever...**

West Nile Fever is a disease that is caused by the West Nile Virus and is therefore frequently referred to simply as "WNV". The disease gets its name from the West Nile District of Uganda in Africa where it was first recognized in humans in 1937. The first cases of WNV in horses were recognized in France and Egypt in the 1960's.

WNV usually lives in wild birds of many different species. Mosquitoes transmit the virus from bird to bird. Occasionally a mosquito that has bitten an infected bird will then bite a human, horse or other mammal and transmit WNV to them. The virus does not multiply enough in horses and humans to be picked up by a mosquito and transmitted to another host so horse-to-horse, horse-to-human or human-to-horse transmission is not likely either.

Many types of mosquitoes have been shown to be capable of transmitting WNV. This is important because different species of mosquitoes have different feeding and habitat requirements, some feed during the day and others from dusk to dawn. Some species of mosquitoes prefer brackish or marshy water to breed in, others are "container breeders" which will lay eggs in anything that holds water (even a bottle cap).

Regardless of these differences, all mosquitoes require a watery environment of some sort for their eggs to hatch so control of these watery breeding sites is the single best way both to control mosquitoes and prevent them from transmitting diseases such as WNV.

While WNV is found in many tissues in the normal bird host (liver, kidneys, heart, brain), in horses it seems to like the brain most, causing inflammation of the brain (encephalitis) which leads to a loss of coordination, lack of interest in their surroundings and loss of appetite and can cause the horse to go down and be unable to get up without help.

Even though the disease is called West Nile Fever, affected horses may not develop a noticeable fever although some will. Approximately 33% of affected horses either die or are euthanized because of the severity of their condition.

Unlike some other encephalitis viruses such as Eastern Equine Encephalitis (EEE), horses that make it through the 2-3 weeks of WNV encephalitis generally recover fully with no long term problems.

There is a blood test that can be run on a live horse that is showing the symptoms described above, but, to be accurate, it must be done within the first 7-10 days after the horse becomes ill.

There is no drug available currently to kill WNV. Treatment consists of supportive therapy to prevent the animal from injuring themselves and nurse them through the 2-3 weeks of the disease. Please consult with your veterinarian for treatment tailored to the particular case.

A WNV vaccine for horses has been developed.



