10th April, 2016

The Agriculture and Environment Committee Hendra Vaccine Inquiry, C/- Mr. Robert Hansen, Parliament House, Brisbane, Qld 4000 E: robert.hansen@parliament.qld.gov.au

Dear Sir/Madam, Re.: Hendra virus (HeV): veterinarians, horse owners and horse handlers, and the vaccination of horses

I am the President of the World Equine Veterinary Association (WEVA), but I am writing this as an individual veterinarian, who happens to be an equine internal medicine specialist. I also recently wrote a chapter with Dr. D Middleton in Drs. Sellon and Long's Equine Infectious Disease's book on Hendra virus and other respiratory viruses (Equine Infectious Diseases 2nd ed, Sellon and Long (eds), 2014 pp189-197).

As you have all been informed 'Hendra virus (HeV) is a serious, zoonotic, potentially fatal virus that is spread from flying foxes to horses, and from infected horses to humans. The clinical signs of Hendra virus in horses are varied and may include fever, elevated heart and respiratory rates, nasal discharge, ataxia, muscle twitching, recumbency, blindness or sudden death.'

There are many differential diagnoses for these variable clinical signs that may occur. Once again, I reiterate the EVA statement that 'diagnosis of Hendra virus infection in horses is impossible without laboratory confirmation.'

I lived in the United States for a period of nearly 13 years. In this time, I was in contact with animals with rabies. The first neurological large animal that I was asked to treat as a resident in internal medicine (as one of the Professors did not agree that it was very possibly rabies) occurred when I had only received partial vaccination with the rabies vaccine (as I had just arrived from Australia). I was exposed (despite trying to use biosecurity measures for myself and the students, as I was concerned it was rabies). This diagnosis of the rabies virus (a zoonotic, usually fatal if contracted, disease) was confirmed at necropsy (post mortem). I and some students (and I believe an intern) had to undergo post exposure vaccination. It was certainly reassuring to have that possibility.

As you will be aware, veterinarians, horse owners and handlers do not have that luxury

with HeV. There is no vaccine for humans, so we must rely on the goodwill of horse owners to vaccinate their horses in order to decrease the potential zoonotic risk.

Another factor that may be of interest to you is that horses travel within Australia. This means that horses may travel from regions known to have HeV to southern NSW, Victoria, SA, Canberra, WA and the NT. Although I have lived in Victoria since returning from the US, it is important to think about the possibility of a horse that has travelled from an HeV endemic area (often for competition or breeding) having been infected with HeV prior to travel. Presentation of a horse with clinical signs of HeV could also very easily match pleuropneumonia (travel sickness) clinical signs, so although rare, we in Victoria still may need to find out whence a horse travelled, and decide if HeV is on the differential diagnostic list. If so, biosecurity measures must be used, but it is not always as simple as it sounds on paper. It would certainly be comforting to know that a horse had been adequately vaccinated for this virus. We can not undergo post-exposure vaccination.

Thank you for your time.

Sincerely,

Kate

CJ (Kate) Savage BVSc(Hons), MS, PhD, Diplomate ACVIM President, World Equine Veterinary Association

Moorabbin VIC 3189