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Gracemere, April 16th, 2016

To the Agriculture and Environment Committee

Re: Inquiry into and report on the Hendra virus (HeV) Equivac® vaccine and its use by veterinary surgeons in Queensland

As a veterinarian involved in a Hendra outbreak that cost one of my colleagues his life (Rockhampton 2009), I am very concerned about the anti-vaccination campaign run by a few people on social media.

My partner John Brekelmans and I have been vaccinating our horses since the vaccine became available; I have personally given 216 doses to date. One horse had a temporary swelling near the injection site which was likely caused by the vaccine, which I found unnecessary to report because of the mild and transient nature of the reaction. This translates to less than 0.5% rate of side effects in our sample. Our horses are valuable cutting and campdraft horses, including the highest money earning cutting horse in Australia 'Ducks Dux', (over \$155,000 prize money), and the top-priced mares 'Duck Down' & 'Sophie Duck' (Landmark Classic sale 2015 & 2016, sold for \$80,000 and \$70,000, respectively). We have vaccinated weanlings, yearlings, performance horses, pregnant mares, and our oldest horse (27 years old). None of our horses experienced any side effects apart from the mild reaction mentioned above. All of our show horses are vaccinated and are performing well. I do not profit in any way from vaccinating our horses, it is a substantial expense for us, and I have no financial interest in the uptake of the vaccine since I don't vaccinate other people's horses. My partner John and I have full faith in the safety of the vaccine.

The Hendra vaccine has been tested and has been proven to be safe and efficient. It is the best prevention for humans from infection with one of the deadliest viruses in the world. Further research is not only unnecessary and expensive, but also requires horses to be euthanized (horses in the 'control group' that are not vaccinated & are infected with HeV), raising animal welfare issues. The side effects of this vaccine are very similar to that of other vaccines - or any injection - therefore I am wondering about the real motive behind this anti-vaccination campaign. Laypeople without scientific background may find it hard to understand how side effects of medications are investigated and evaluated. Many of the cases of 'side effects' after vaccination reported on social media are not verifiable and/or unrelated to vaccination and used as misleading propaganda material, similar to what happens in other (human) anti-vaccination groups. I have worked as a veterinarian in several countries in Europe and North America, where some vaccines are mandatory and *all* vaccines can only be given by veterinarians, and find the outrage here in Australia about *one* single veterinary-only vaccine simply baffling.

Some horse owners seem to think that the risk of infection is low, due to the small number of outbreaks and human fatalities, but the *actual* risk varies depending on geographical area, and high-risk areas could spread further south or inland. Research has shown that areas in QLD where flying fox roosts occur are 40x more likely to have a Hendra virus outbreak than others (McFarlane R, Becker N, Field H, 2011. *Investigation of the Climatic and Environmental Context of Hendra Virus Spillover Events 1994–2010. PLoS ONE 6(12). doi:10.1371/journal.pone.0028374*). Density of certain fruit bat species (black and spectacled flying fox) have a strong positive correlation with equine Hendra outbreaks, which overlaps with the area of recorded outbreaks from far north QLD to central NSW (Smith, C., Skelly, C., Kung, N., Roberts, B., & Field, H. 2014. *Flying-fox species density-a spatial risk factor for Hendra virus infection in horses in Eastern Australia. PloS one, 9(6), doi:10.1371/journal.pone.0099965*).

My partner and I live in an area that has seen 3 Hendra virus outbreaks since 2009, and being able to vaccinate has put our minds at rest because we don't have to worry about getting exposed to Hendra virus during daily activities like riding, scanning mares, giving medications etc. any more, and also because we don't want to see our valuable horses die in a horrific way. I would not want to go through another Hendra outbreak again - not knowing if you are infected for 3 weeks is an experience I do not wish to repeat. Having to endure quarantine for 4-5 weeks after an outbreak would also harm our business, if we would miss the Landmark Classic sale or the NCHA futurity for example. Horses are our business and we want to protect our assets, and the vaccine - although expensive - is the best protection against Hendra virus. Apart from the obvious animal welfare and human safety issues, a Hendra virus outbreak is also financially devastating for any equine business, and I can't see insurance companies cover businesses for an event that is so easily preventable.

Horse owners should have full responsibility regarding health & safety of every person in contact with their unvaccinated horses, and also for monetary damage done to any business that has to be quarantined due to their horses causing an outbreak. If horse owners choose not to protect their horses and themselves and others against a preventable disease, they should be held liable for the consequences.

If liability rests with veterinarians, as it is the case now, many veterinarians in regional and rural areas will stop to do horse work because of the high risk of getting sued, and many areas will struggle to have access to equine veterinarians. Many equine veterinarians will leave the profession (like me). Also, equine hospitals will continue to refuse to accept sick unvaccinated horses until Hendra virus is ruled out - due to the risk of a Hendra outbreak at their premises - leading to animal welfare issues and often to the death of horses that could have been saved otherwise.

Working with horses in full PPE at all times is unrealistic, whoever thinks it is feasible to work all day with horses in waterproof overalls, gumboots, P2 mask & goggles in the QLD summer has obviously never done so! Many horses veterinarians have to deal with are very poorly handled and dangerous to treat at the best of times, and wearing full PPE makes the

task even more hazardous. Veterinarians have to work out in the open in any weather, and often during the night, deal with bleeding wounds, birthing fluids, urine and faeces, and any mistake, any little tear in a glove or a needle stick injury can be life threatening if the horse is infected with Hendra virus. PPE is NOT the best protection against Hendra virus - the vaccination is.

Are the few (proven) adverse vaccine reactions (less than 0.3%!) really more important than protecting human life? Common sense has prevailed in human vaccination policies ("No jab, no pay"), and hopefully will do so when it comes to animals.



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