

## AGRICULTURE AND ENVIRONMENT COMMITTEE

#### **Members present:**

Mr GJ Butcher MP (Chair) Mr AJ Perrett MP Mr JE Madden MP Mr J Pearce MP Mr EJ Sorensen MP

#### Staff present:

Mr R Hansen (Research Director) Mr P Douglas (Principal Research Officer)

# PUBLIC HEARING—INQUIRY INTO THE HENDRA VIRUS EQUIVACC® VACCINE AND ITS USE BY VETERINARY SURGEONS IN QUEENSLAND

TRANSCRIPT OF PROCEEDINGS

WEDNESDAY, 6 JULY 2016 Redlands

### **WEDNESDAY, 6 JULY 2016**

Committee met at 1.31 pm

#### LOVELL, Dr David, Veterinarian, Redlands Veterinary Clinic

**CHAIR:** Good afternoon everyone. Can I start by acknowledging the traditional owners of the land on which we gather here this afternoon for this important meeting. I declare open the Agriculture and Environment Committee's public hearing into its inquiry into the Hendra virus EquiVacc vaccine and its use by veterinary surgeons here in Queensland. I am Glenn Butcher MP, the committee chair and member for Gladstone in Central Queensland. With me today are Mr Tony Perrett, the member for Gympie and our deputy chair; Mr Jim Madden, the member for Ipswich West, to my right; Mr Ted Sorensen, the member for Hervey Bay, to my far left; and Mr Jim Pearce, the member for Mirani, on my far right. I have apologies today from Mr Robbie Katter who cannot be with us today. Mr Jim Pearce has been appointed to this committee for the hearings this week due to the inability of the member for Mackay, Julieanne Gilbert, to attend today. I also have an apology today from Dr Mark Robinson, the member for Cleveland, but I acknowledge the member for Redlands, Mr Matt McEachan MP, who is here with us today.

The inquiry was referred to the committee on 25 February 2016 and the committee is required to report to parliament on 22 August 2016. Submissions accepted by the committee are published on the committee inquiry's web page. Witnesses are not required to give evidence under oath today, but I remind witnesses that intentionally misleading this committee is a very serious offence. I remind witnesses that these proceedings are similar to parliament and are subject to the Legislative Assembly's standing rules and orders. In this regard, I remind members of the public that, under the standing orders, the public may be admitted to or excluded from this hearing at the discretion of this committee. Mobile phones or other electronic devices should now be turned off, or switched to silent mode, please. Hansard is making a transcript of today's proceeding, which we intend to make available on our website. Those here today should note that media may be present in the building. It is possible that you may be filmed or photographed today. I ask witnesses to please identify themselves when they sit in front of us and speak clearly and loudly into the microphone.

Finally, I remind witnesses of the importance of being relevant today. Our inquiry has specific terms of reference and they dictate what the committee can examine and report on. They include the incidence and economic impacts of adverse reactions by horses following vaccination and the reporting of those adverse reactions and economic impacts. We do not have scope today to hear personal complaints, disputes or other grievances against vets, horse owners or others over the treatment of horses. If you wish to raise such matters in your evidence that you believe to be relevant to the inquiry, I ask that you do so without naming any individuals involved in those cases. I now would like to call on Dr David Lovell from the Redlands Veterinary Clinic to come up and be the first speaker today.

**Dr Lovell:** Thank you very much for giving me the opportunity to speak here this afternoon. I have been in there this morning and I certainly enjoyed that very much. I will be a little bit different in my presentation, but I beg your indulgence. I would just like to stand up for one minute. I want you all to look very carefully at me, because I am probably the second most eligible person on this planet to speak at this meeting. The person who is more eligible than me is Natalie Boehm, who I believe spoke yesterday. I am the proprietor of Redlands Veterinary Clinic and we had a major outbreak quarantine in 2008. One of my veterinarians, a very close personal friend, passed away—succumbed to the disease—and Natalie, who you would have spoken to yesterday, has had her life ruined as a direct result of this dreadful disease.

The impact on me as an employer was unbelievably bad—the stress and the pressure. Very few people can really understand the emotion that occurs when some of your staff become involved in something like this. It was a terrible time for all of us. Certainly, at that point in time, I had spent the best part of 40 years building up probably one of the biggest veterinary hospitals in Australia. We had 44 horses in our hospital in quarantine at that point in time. We lost the lot. We were quarantined and out of action for a period of approximately three months. My outgoing expenses each month in our business were over \$300,000. We had zero income for that three months. At the end of it, I was close enough to a million dollars in debt. That is the impact that this disease can have on institutions that make their money, or survive in the horse industry.

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I want to digress for one minute and go back to 2007 when the industry in South-East Queensland was immobilised through an equine influenza outbreak. This was a very emotional and worrying period for everyone in the industry. We were all quarantined. We were all shut down. There was no movement of horses. I remember one meeting at Carindale that we went to and Biosecurity Queensland was asked, 'When do you think the quarantine will be lifted?' This was in October. He said, 'Maybe by next July.' Can you believe that? I cannot go into the details of what was happening there, but the net result was that a vaccine was developed and put into use by the government of Australia. It was paid for by the government of Australia and it was extremely successful. That in itself resulted in the elimination of the disease from this country.

The point about it is that the public all knew how effective this vaccine was and they all had access to it and it was provided at no cost to them. That was very significant. In my career, I have had very many positions and I point out that I am still currently a member of the Veterinary Surgeons Board of Queensland in relation to one of the issues this morning. During my time in the 1990s with the Australian Veterinary Association, there was a lot of bad communication between the department of primary industries of Queensland and the veterinary profession. There was a lot of lobbying and the net result was the formation of the Horse Industry Biosecurity and Market Access Liaison Group, of which I was a founding member and I am still a member of that group. This was a group of all the stakeholders in the horse industry in Queensland and we meet three or four times a year.

In 2011—this is the time that is relevant to this inquiry—we had the cascade of cases. I think there were something like 18 cases of Hendra. The industry was in chaos. We had these APVMA—hamburger group they call it—meetings. It was once a week and teleconferences many nights in between. The industry was in uproar demanding that someone do something. There were lots of things they wanted done, but one of the things that the industry was demanding was the development of a vaccine. The governments of Queensland and New South Wales took action. They committed funds and put an urgency motion on the development of the vaccine. Remarkably, I think it was just over two years a vaccine was fast-tracked and made available purely because of the demands of industry to try to circumvent more horses being affected, more humans being affected, more disruption to industry. It was released prematurely absolutely—but they were still satisfied; it was a very good vaccine—but it was released with some severe restrictions on its use, which has turned out to be one of the bugbears with the vaccine. But most importantly, and a dreadful insult to the horse industry in South-East Queensland in their view, was that they had to pay for the vaccine.

I am sitting here, so it is my personal opinion—but I can tell you that it is very accurate—the reason this inquiry is here is that the vaccine was not free to the public. They remembered equine influenza and they thought, 'This is going to be great. We'll get our vaccine and we'll all hop to it and we'll get it for nothing and Hendra will be gone.' That was not the case. This Biosecurity Queensland group that we were working with, most of the members on that committee are now the people who are objecting and trying to get rid of the use of the vaccine. Events shut down. There were no competitions occurring over a period of several months during that dreadful time. Everyone wanted vaccines.

The vaccine came out and now they do not want it. As a veterinary practitioner, I still go out. I look at horses every day. We have a policy at our practice that we will not attend horses that are not vaccinated. I think I have every right to make that declaration. The overwhelming individual who suffers because of all of this is the horse. Just do not forget that. Because the owners make a choice not to vaccinate their horse, that horse is susceptible to disease. Any horse that is sick—and the presentations of Hendra disease are wide and varied; there are many, many symptoms, there is no perfect category as to what is going on—almost every horse that we go to look at that has a high temperature has to be submitted for a Hendra exclusion test. That is the rule now. It is a notifiable disease. If you suspect it in your differentials, you have to test for it. You then have to invoke all of these biosecurity measures that just make it very, very impractical.

If all we talk about is the need to do an exclusion test, at best here at Redlands, if I look at the horse in the morning I can get my test back by six o'clock that night. The lab is great. They provide a very good service. If they have a high probability case on the weekend, they will come in and they will do the test for it. I can still get my results in eight to 12 hours usually, but many practices in Queensland cannot get it for 48, 72 hours. So that poor horse has to sit there and suffer all because the owner chose not to vaccinate the horse and we vets are being vilified and crucified because we will not go out and look at the horse. I think it is an intolerable situation and I would hope that an outcome from this inquiry will be that there is a lot of strong support for vaccination as being the gold standard for biosecurity. Thank you.

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**CHAIR:** Thank you very much for that, David. It was great to chat with that young lady yesterday to get an understanding of the firsthand impacts of what the effects of this disease can be. Obviously, we need to make some recommendations as a committee from what we hear. What I am getting from you from your talk today is that you believe that there should be compulsory vaccination for all horses in Queensland. Is that what you believe?

**Dr Lovell:** I do not claim that, because I do not think that is possible. I think the government of Queensland would not enforce something like that. I think that what we would be looking for out of this is a very strong endorsement of the vaccination and people need to know they have the right to choose whether or not they vaccinate their horse. If they choose not to vaccinate it, there are certain consequences of that decision. Similarly, a veterinarian has the right to choose whether they go and attend a case. It is pretty simple.

**CHAIR:** On communication around the Hendra virus and the vaccine itself, we have heard a lot of conflicting stories, particularly from social media. What recommendations could we make on communication around the vaccine itself? Is enough being done?

**Dr Lovell:** I think so. I do not think there are any horse owners on the eastern seaboard of Queensland and New South Wales who are not very well aware of the fact that the vaccine is there. The misinformation is all this dreadful controversy about the effects of the vaccine. The vaccine is an inert product. It is put into the horse. If you are going to get a reaction to it, it will be within 24 to 72 hours. For anything post that, there has to be a very tenuous connection to try to relate it. Our practice has given probably 1,500 vaccinations. We have had remarkably few stiff necks. That would be the worst thing that I think we get. I have a policy in our practice that when we vaccinate a horse for a client, we tell them that they must give that horse 48 hours off. If it has a bit of a sore neck, let it get over it and then resume normal training. They just factor that in to when they vaccinate it.

**Mr PERRETT:** Thank you for your testimony today. It has been very enlightening in respect of what you had to go through as a business and the personal consequences. I want to follow on from what the chair said in respect to the communication and how you have gone about that directly within your business and with your clients. Obviously you have a client base. Once the EquiVacc vaccine was available, what process did you undertake as a business and as a veterinary service to engage directly with your clients to advise them of the benefits, in your opinion, of vaccinating their horses and any follow-up that you may do? From what you have indicated to us, you are looking for a strong recommendation from this committee in respect to support of vaccination. I will be interested to hear how you engage directly with your client base with regard to this.

**Dr Lovell:** I do not know that I am active in direct promotion or advertising, if you want to say it like that. You have to understand that in equine practice your clients really are your friends. You spend most of your life—and my practice has constricted dramatically. I am really only left with my really good core clients. I speak with them all the time, every one of them. I did not have to ask them to vaccinate; they just wanted to vaccinate, because they are all caring. A lot of them run businesses: riding schools, breeding farms. Those people realise the risks to them as business owners of, first of all, some of their staff inadvertently becoming affected and/or the disruption to their cash flow. They just want to do it.

**Mr MADDEN:** Thanks for coming in today, Doctor. It is very good to see you. I want to ask about communication with the horse owner around issues such as side effects, reactions, the need for vaccination. Do you think vets are doing enough with regard to that communication or do you think that the government should play a role with regard to that communication?

**Dr Lovell:** Very much so. I think the government should play a very active role. I have discussed this with Alison Crook on a number of occasions. Certainly in our practice we discuss these things with our clients all the time. At my age, I am not very much a digital communicator. Our clients are very strongly aware of the benefits. It is the smaller people who are not really in the mainstream or perhaps are not involved in pony clubs. Those sorts of people are missing out. It is not enough to just say, 'Put something on the website'. A lot of people do not troll websites as their favourite past time. I think a government presence out at events and around the ridges. People know; most people know. I do not know that there are too many people in this area who are not fully aware of Hendra. It was sensationalised by the media, and then the vaccine. This stuff about the reactions is where I think there has to be a fairly major marketing program, if your learned committee comes to the conclusion that it seem to be a relatively effective and safe vaccine, as APVMA says it is. I think there needs to be something there about the safety of the vaccine.

**Mr SORENSEN:** Doctor, what is your opinion on PPEs? Are they adequate enough to stop infections into humans?

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**Dr Lovell:** That is an interesting question. Probably I have been exposed to more individual cases of pre-Hendra horses than anyone else on the planet. We have five horses in our hospital. In my practice, my process is to examine and assess every horse every day, sometimes three times a day. I have very close contact with each and every one of those horses. It was never in our thoughts that we were going to have a Hendra outbreak. I think four of them occurred fairly quickly. One of them was a couple of weeks into the incubation.

I am meticulous in my own personal habits in that I always wash my hands in between each horse that I examine. If I am looking at a horse so that I am exposed to any sorts of fluids—if I am looking in its mouth or in its eye or dealing with a wound on its leg—I will always wear gloves. That has been a policy in our practice all the time. I think that is what saved me from contracting the disease: fairly pedantic personal hygiene. I think that was enough. This is in these preclinical cases. If you have a horse that is frothing and fulminating, you want to put whatever you can put on it. I attended several times to the 1994 outbreak. The first day I came home, my wife made me take all my clothes off and leave them in the frontyard. I was not even allowed to go into the house and we did not know it was Hendra disease, then.

I think a common-sense risk assessment of each horse and good personal hygiene are probably enough to give you a very good chance of not contracting the disease. If you are doing an invasive procedure, that is different. If you are doing dentistry, an endoscopy or stomach tubing a horse, certainly you need to be a little more careful. I am not sure that, in every early case, you need to fully suit up because it is almost impossible to do. On your questions about the costs of suiting up and who bears it, there is a very good government scheme where you get a rebate for each suit, but that is not what the cost of the PPE is; the cost is the time involved and the difficulties of suiting up, un-suiting, the uncomfortableness. Those are the issues with PPE.

**Mr PEARCE:** Doctor, could you explain the reporting process for adverse reactions? Who considers that report and what process is in place to report back to the horse owner at the end of it?

**Dr Lovell:** It was a condition of the permit that when any veterinarian administered the drug and there was any adverse reaction, you had to report it. It was mandatory. That becomes professional misconduct and a board issue if the veterinarian did not report adverse reactions. However, in my situation, the report was a contact with Zoetis detailing the cases. I had a couple of cases where Richard contacted me to discuss it. We did not have many reactions. That would be the other thing. We had very few. In most of them, we had already dealt with the owner. If the horse had a stiff neck or was deemed to be fairly uncomfortable, we would give it one dose of phenylbutazone and the horse would respond and was fine. I do not know that I had enough serious cases, that there was any real need to report back to the owners. In the report to me about the reaction, I would discuss it with them. If I had any other information, I would get back to them about that, but they were all fairly simple and straightforward.

Mr PEARCE: You do not think there is any need to report back to the owners?

**Dr Lovell:** Certainly I cannot say that there is not, because that is communication. Private enterprise and business are about customer service so, yes. If the horse had a reaction and they rung me, I would certainly ring them the next day to find out how the horse was, that it had responded to what we were doing, that it was doing okay. I am not so sure that we had any real communication back from Zoetis about the small little lumps and the stiff necks. If you have a tetanus vaccine, if you have a shot yourself at the doctor, you will be a bit stiff in the arm. Those are fairly normal things.

The biggest thing that we insisted on was that the horse would have 48 hours off after the vaccine. There were some instances where the owner rode the horse—not in our cases, but I have been involved in a couple of them. The owner rode the horse the next day and was thrown off the horse. It is just common sense. The horse is an explosive, very powerful animal. If it has a bit of a stiff neck and someone jumps on its back, it is going to tell you that it is not very happy. If they reported something to me and I was concerned about it, I would get back to the owner, as in parts of our business model, and be satisfied that the horse was doing okay.

**Mr PEARCE**: Since the release of the vaccine, would you have kept a record of how many times you have actually had to take the report of an adverse reaction further up? Would you have any records on that?

**Dr Lovell:** We would have noted something on the horse's record, but I would not have kept a cumulative account of it. I am sorry, but at our place it was so infrequent to have anything.

CHAIR: Thank you very much, Dr Lovell. I now call on Ms Sharon Carroll, please.

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#### CARROLL, Ms Sharon, Private capacity.

**Ms Carroll:** Good afternoon. I am Sharon Carroll. I have a bachelor degree in equine science, a graduate certificate and graduate diploma in captive vertebrate management, a masters in animal science and I am currently undertaking a bachelor of medical science in pathology. I also work as a coach in the equestrian industry, and I ride and coach at elite levels. I work full time as a vet tech in New South Wales and Queensland and have done for the duration of the time since the release of the vaccine. That is my basis for talking today.

I would start by saying that I am provaccine. I believe in the science behind vaccination. I am fully vaccinated. My dogs and cats are fully vaccinated. My horses are vaccinated with core vaccines. However, I have an issue with the Hendra vaccine. I think that for starters, unfortunately, it is a very weighted debate. We really cannot say that all vets are provaccine, but certainly for the sake of this let us say that the vets are on one side and the horse owners are on the other. On one side we have the vets who are very educated and hopefully eloquent and hopefully rationale in putting their case forward. Sometimes, on the other side we have horse owners who may be only speaking about one case and, of course, one case can be very easily dismissed. We are also sometimes talking about people who are very emotional. When we are talking about horse owners, they have had something directly happen to their horse. That is an emotional situation, just as it would be if it happened to a family member. Pets and/or performance horses can be very important to the people who own them.

I would say the other thing that is important to note is that most of the people who are speaking with concern about the Hendra vaccine are not antivaccine people. I say that because most of those horse owners obviously went and got their horse vaccinated. They believed that it was the right thing to do and then subsequently decided that maybe it was not the best choice for them and for their horse.

To start with, I would like to look at the issues that I have with the vaccine. I think the current reporting is flawed by nature. Having the vets as being obviously so in need and so much wanting this vaccine, clearly, probably does not make them the best people to be the main focus for reporting any adverse reactions. The other issue that I would have with that is that a lot of the vets are speaking of reaction rates outside of 48 or, at the worse, 72 hours being completely unable to be causally linked to vaccines and hence they will not report them. I would argue that, in medical literature and absolutely mainstream knowledge, late-onset adverse reactions are very common with vaccines. Indeed, in some of the standard childhood vaccines we see reactions at seven days, we see reactions at nine to 15 days, we see other reactions up to 21, 22 days, depending on the vaccine. So deciding anything outside of 48 hours should not be reported, I think, is a flaw.

I think we have to also look at the reaction rates. When we hear vets saying that, in their practice, they have not seen a reaction, I think they are probably very much telling the truth. I think that you have to remember that even medical products that are taken off the market because of safety issues, sometimes doctors have prescribed those medications for many years to many patients and have never seen an issue but it does not mean that cumulatively across-the-board there is not an issue. Obviously, those issues are detected by gaining all of that data together and analysing that data.

On looking at that, the other thing to probably note is that, in these cases, horse owners do not report either to the APVMA or to their vet a mild reaction. We know ourselves that, when we get vaccinated or we get injected we get a bit of redness, a little bit of a sore arm, tenderness at the site, or swelling. In horses you are not even going to see the redness and bruising. With slight swellings, people really are not concerned. Tenderness at the site is expected. Small lumps are expected. I am talking about having seen horses with a half a grapefruit sized lump, half a soccer ball sized lump on the horse's neck. I think we would all agree that, if we saw that on our arm, we would probably also seek medical intervention and these people seek veterinary advice at that point.

Once people are reporting, we are talking about large swellings, we are talking about horses that are very sick, horses that are colicing, horses that are in a lot of the pain. Again, if we have an aching arm after an injection, that is to be expected. The horse having a stiff neck is to be expected. But when you are looking at horses that cannot lower their heads to eat or drink and people are having to hold up their food bowls for them for four days post vaccination and holding water up for them so they can drink, that would be equivalent to our arm being so sore that we could not feed ourselves for four days. These are quite significant reactions.

In just looking at that, we would say that, in human vaccines, we look at about that one in 10,000 mark. Certainly, in hypersensitivity—say severe reactions—we are looking at one in 500,000 to one in a million. In fact, the APVMA also note that any medication that is receiving more than a one

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in 10,000 adverse reaction rate they deem possible and probable and is something that requires further investigation. In saying that, I do not have the exact number of doses that have been administered to date, but just in the three-year period—2013 to 2015—the APVMA is stating 927 probable/possible reported. That is the reported reactions. So we can see straightaway that this is way outside of that one in 10,000. This is many more adverse reactions than that.

Again, we are only looking at reported ones. On my travels, I have spoken to many people who have not reported either because they spoke to the vet and the vet said, 'No, definitely wasn't vaccine related' or they have decided that they did not want to argue with the vet about it, or they just did not really care. In the case of a couple of feedlots and cattle properties that I spoke to, yes, they vaccinated 10 horses, one went a bit wobbly and it was dead the next morning, but it did not really matter. The most important thing to them is that they have been told that they need to, for legislation reasons, or that they need to for litigation or other reasons, or that they need to because they will not get veterinary attention otherwise. They have mainly been concerned, obviously, about the staff and that is why they have gone ahead and vaccinated and they have not reported.

I have spoken to a lot of people who have not reported and I have seen a lot of adverse reactions and I have seen them firsthand. I have seen a lot of polyarthritis, I have seen a lot of laminitis, I have seen a lot of horses that have had colic, temperatures, pain and giant swellings. Going on from there, we have to say that you have to look at risk-benefit. I absolutely understand that in human vaccines even we expect that there are adverse reactions. In fact, there are deaths. However, we weigh this against the risk of the diseases that are involved. In this case, we are talking about a disease that has had four human deaths. There is no other vaccination in the history of the world that has ever gone into market and had a protocol based around four human deaths. It is tragically sad for the people involved. Any human death is tragically sad. However, we have to analyse this at much more arm's length. We have to be able to stand back and say that it is terribly sad. We have learned a lot since then—since we have known about PPE, since we have known more about the disease. There have not been any more human infections. I think that we have to be able to be a little more able to do a proper risk-benefit analysis and not be emotional about individual cases which, of course, are tragic, but are individual cases.

I think when we look at who died we are talking about people who did invasive procedures—in fact, people who contracted it. I know that people constantly worry about the risk for handlers but, in fact, as some people have already spoken, when they go to the site not one person has been wearing PPE yet not one horse owner has contracted this disease by just handling their horses. If hugging horses' muzzles was going to cause this disease, then we would see pony club children dropping like flies, which is not what is happening. Luckily, the people who are likely to catch this disease are people who are educated and people who are in a position to protect themselves.

**CHAIR:** Excuse me. We have pretty strict time restrictions. Can we just wrap it up? That would be great.

**Ms Carroll:** Yes. I think horse comfort and welfare has to be a consideration. Even though we consider some of these reactions to be transient—I think the word is 'transient'—yes, it is important, yes, these animals get over this over a short space of time, but these animals are in a lot of pain and are having to get veterinary intervention to recover from this. I think the reactions are certainly concerning.

I think that we need to ensure that there is a proper risk-benefit analysis. We need to make sure that we do not have people who have been personally and emotionally involved in these types of cases being part of the decision-making body. I think their information is useful, I think their input is good, but I think decisions in every walk of life must be made by people who are at arm's length and who are able to fully analyse the risk and the benefit to the wider community.

**CHAIR:** Thank you very much for that. Can I just clarify something? You say that you know of a person, or a family who has had a horse immunised and which has died and they have not done anything about it, or said anything to anybody about it?

Ms Carroll: Yes.

CHAIR: Why would they not be concerned that one of their animals has died?

**Ms Carroll:** They are not family horses. These are feedlot horses. They are just horses that are used for mustering. They have 40, 50, 60 horses. They grab 10 at any one time and head out on them. They die from all sorts of things. They die from snakebite, they die from colic. These horses are not people's pets. However, they have been concerned from the media that they should make sure that their staff are protected, the riders are protected, so they have decided to go ahead and immunise.

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CHAIR: And your comment was that the horse died because of the vaccination.

**Ms Carroll:** My comment was it is obviously plausible that the horse died from the vaccine. It received the vaccine within 24 hours of dying.

**CHAIR:** But it could have died of something else. **Ms Carroll:** It could have died of something else.

CHAIR: Okay. Thank you.

**Mr PERRETT:** Thank you. That was my line of questioning. I wanted to know if it was clinically confirmed that that death was directly associated—

Ms Carroll: No, it was not reported. This is one of the many not reported.

**Mr PERRETT:** You have obviously got very strong opinions in and around vaccination. I come from a rural property. We vaccinate, whether it is cattle, dogs—all manner of things—and understand the risks that go with it. But, once again, as identified earlier, there is a risk benefit and we make choices based on that. Given your view in and around the Hendra virus, what are the alternatives then for the people who choose not to or, in your opinion, believe that it is not worth the risk? What do you then advocate with respect to the alternative methods that property owners can use to mitigate the risk?

**Ms Carroll:** You are referring to, obviously, management of the horses, making sure that they are not in areas—and I think most horse owners do this; nowadays, people are aware of this—that they are not under fruit and flowering trees that have bat colonies associated with them and, I think, being aware, watching out for signs of sick horses, using PPE where appropriate. Unfortunately, for a lot of people the ability to call a vet has started to become a problem because of the no vaccination, no treat policy.

**Mr PERRETT:** Just on that then, do you support vets who make that choice as you do, obviously, with horse owners who make the choice not to vaccinate? Do you support vets in their decision not to attend an animal if it is not vaccinated?

**Ms Carroll:** Sure. Legally, they have every right to knock back any case they want to. They are not under the same guidelines as medical professionals. They just run a business. They can choose to service a customer or not service a customer completely at whim and that is legally their choice and their right. I would be concerned about the collusion that has been involved in some areas between veterinary clinics getting together and deciding to put in no vaccination, no treat policies at the same time and to push for vaccination, but individual vets making individual choices is their right.

**Mr PERRETT:** Collusion? You have evidence that you can present to this committee of veterinary practices colluding to lock out an area?

**Ms Carroll:** Colluding as in, obviously, in some of the more remote areas where you have maybe only three practices covering two or three hours of territory, they all know each they are. They are all friends. They all discuss these issues and I think that would be normal.

Mr PERRETT: But do you have evidence of that?

**Ms Carroll:** I know of specific areas that that has happened and I know of people who actively will tell you that they speak with other clinics and that helps them make decisions, yes.

**Mr PERRETT:** I would just be interested to know, while not mentioning names, that you could present something to the committee that proves this collusion.

Ms Carroll: I think it would be difficult. It is certainly not written communication.

**Mr PEARCE:** Vets have raised the probability of human-to-human Hendra infection. What is your view on that?

**Ms Carroll:** I think that, obviously, where that comes from is the fact that Hendra, Nipah, cedar are all part of the one genus. Obviously, with Nipah, we know of bat-to-human and human-to-human infections. I would say that, in this case, we are already finding that it is really hard for this to go from bats to horses and then really really hard for it to go from horse to horses and really really hard for it to go from horses to humans. I think it is a very longbow to draw and there is no reason to believe that this will go from human to human. I think relating it to Nipah is very scary because Nipah scares people. In the very first Nipah outbreak nearly 300 people were infected and 160 died and a million pigs were destroyed. This is a very different disease to Nipah.

Mr PEARCE: It is not really the right thing to be doing to be linking the two together.

Ms Carroll: Not really.

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Mr PEARCE: I see it as a scare tactic more than a fact.

**Ms Carroll:** Pretty much, yes. They are linked together purely because they are structurally similar and there are a lot of similarities, but certainly there are not similarities between the virulence or even between the species that are infected. I think trying to draw the two together is inappropriate in this case.

**Mr SORENSEN:** I come from a rural background myself. We vaccinate cattle, dogs—everything. When I had my own son vaccinated against smallpox he had a terrible reaction. I didn't turn around and blame anybody for that. I allowed my daughter to be vaccinated against all the things that they should be vaccinated against. I find it difficult to believe that we have a vaccination and just because there are a few horses that have had bad reactions why should we deny the rest of the community safety.

**Ms Carroll:** I think it does come down to those few reactions. The case you are speaking of, I agree. Originally when individual people said to me my horse has had a reaction I was, like, you know, you will get that, you will get that when you put anything into an animal's body. I think though what we are looking at is rates that are higher, that are far in excess of what is acceptable. I don't think it is comparable. We know there are human reactions to vaccines, but we monitor it very closely in that we know that those levels are acceptable within the risk benefit scheme, but these levels are, I would consider, beyond that.

CHAIR: Thank you very much, Ms Carroll, for your information today.

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#### SQUIRE, Dr Kevin, Veterinarian, Byron Bay Equine Practice

**Dr Squire:** Firstly, good afternoon. I would like to thank the committee for their interest in this issue. It is an issue that is very dear to me personally, to me professionally, to my profession as a whole, to veterinarians, veterinary assistants, horse owners and horses. I graduated with a veterinary degree in 1976. This is my 40th year. I have two masters degrees from the Australian university in virology and a Phd from the University of California in virology. I worked for CSIRO in virology for three years. I left academic research in 1991 to return to full-time equine practice. In 1991 I was in racetrack practice in Brisbane and the Gold Coast. I was in Brisbane and Hendra when the first outbreak occurred, although I had nothing to do with it.

I now run and own a single veterinarian practice. It is called the Byron Bay Equine Practice, which is where I live, but 50 per cent of my clients are still in South-East Queensland. I actively promote Hendra vaccination to the point where I offer free Hendra vaccination to horse owners when I do a routine annual dental check up. I was a senior veterinarian in a nine-veterinarian corporate practice for 11 years. We had veterinarians based in Townsville, Brisbane, Gold Coast and the Tweed and we probably vaccinated—and I am reluctant to give these figures but I am guessing, if the committee wants them I could try to find them but I now have nothing more to do with that practice—about 5,000 doses of vaccine. Again, unless you talk to every veterinarian that used those vaccines, I recall no reports from any of our veterinarians and I have definitely had no reports of severe reactions. Yes, there has been approximately 10 per cent sore necks to the point where horses cannot lower their head and they have to be fed and watered with water held up to them for a few days, but that's the most I've seen over the years.

As I said, I actively promote vaccination, but I've taken the stance where I, in my practice, and even in the corporate practice that I headed, never, ever forced a veterinarian to attend a case who did not want to attend, but it is my strong belief, that I adhere to to this day, that I will attend sick animals regardless of their vaccination status. I live in Byron Bay, and just as a side point here, Byron shire has the lowest human vaccination rate in Australia and it has a human vaccination rate level with Somalia. So, these people don't vaccinate their kids for whooping cough and measles diphtheria; they are not going to vaccinate their horses. As Dr Lovell pointed out, any idea of getting a 100 per cent vaccination rate in horses is pie in the sky. Which puts the veterinary profession in a difficult situation. As you all know, the vast majority of infections have been to veterinarians or veterinary assistants—all except two. Until 2015 veterinarians, as far as I know, were still all attending every horse that was sick regardless of the vaccination status. Since 2015 this has changed dramatically. Now there are many practices, and I do not denigrate them and I do not judge them, but because of the occupational health and safety issues, many practices are now not attending sick horses that are not vaccinated.

I am a veterinarian. Most people in my profession are veterinarians because we love animals, we love working with them and we have a high degree of compassion for them. We are the doctors of the animal world. Doctors don't say to you, 'You've got HIV aids and you've engaged in unsafe sex practices, I'm not going to treat you', and I don't think we should do that as veterinarians. We've been forced into this situation because of the legal charges against us. Since 2015 a number of things have happened: unvaccinated horses are now dying because either the owners cannot get veterinary attention, the vets are too scared to go out; the veterinarians are more scared of the litigation than they are of the disease; or veterinarians are going and then doing basic minimal care until they get a result from the Hendra vaccination test which can take, from where I live, 48 to 72 hours; or owners, if they cannot get veterinarians, they are calling non-veterinarians to go out-and I know of two non-veterinarians who are actually extremely competent horse people that are going out and seeing colics, et cetera, because the veterinarians wouldn't go, the horse is not vaccinated; or owners are being charged \$500 in some cases for lame horses or a horse with a skin disease, and to my knowledge there's almost no chance that horse has Hendra, the owners are being charged \$500 and receiving a lecture from the veterinarians on how they should be vaccinating their horses. I find all of this has happened since 2015. I am here today, and I concur with the discussion about the vaccinations, the pros and cons, which I'm quite happy to enter into with my own opinion, but I am here today to represent the horse. Unvaccinated horses are dying and I find that is a great shame. An unvaccinated horse is not being attended to by veterinarians because of the litigation problem.

I will end now, and my request to the committee is that in their analysis of all the information that really the healthcare professionals should be given some kind of indemnity against prosecution when they are out there in the middle of the night obviously or the weekends or Sunday afternoon doing our job attending sick animals. This disease, as you know, is almost undiagnosable without the

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testing coming back. It is not the horse's fault whether the horse is vaccinated or not and we should be attending to them and I find it very, very sad that healthy unvaccinated horses are dying because of the threat and the scare around the litigation problem rather than the disease.

One last thing I would like to point out is that the last human infection was in 1999. I am very proud of the way my profession has handled this horrendous disease and horrendous challenge. We have come to grips with it slowly over the years. As I said, the last human death was 1999. This has been a very proactive vaccination campaign with, in my opinion, very few problems. Veterinarians themselves, like David Lovell said, are taking much more care in our hygiene and the way we treat and handle animals that may be positive or not. The government is behind us at least with the testing procedures but then are against us with the litigation procedures from occupational health and safety. So in my opinion the veterinary profession has done a remarkable job on this and I would just like to see the government swing behind us a little bit instead of fighting us on this, especially when it comes to the welfare of the horse. Thank you.

**CHAIR:** It is great to hear your passion, particularly about the animals. My question is around the litigation. Obviously there are thousands and thousands of vets in Queensland. We have heard today that there have only been three vets who have been charged with any form of issues with the law and only one has ever gone to a court case and basically was just given a bond if they reoffended. From what I can gather, and from the hearing this morning, there have not been a real lot of cases, other than three cases, where vets have been actually taken to task on things that they are doing wrong. Is it that big a deal in the veterinary industry that people are that worried with only three cases being brought to them?

**Dr Squire:** I know two of those veterinarians personally. I hold them in the highest esteem. They did nothing I would not have done on those cases. I could have been in those situations. The other thing is it was a cluster of three. My understanding of it was it was an overzealous interpretation of the rules by one person in occupational health and safety. I think this needs investigating.

**CHAIR:** The concern across the whole veterinary industry is on one person with one case with three individuals?

**Dr Squire:** One person in occupational health and safety prosecuting three individuals, I believe that was the case, but I don't know. All I am saying is up to 2015, and you will have to ask other veterinarians this, my understanding was, apart from perhaps some routine procedures, like a veterinarian who worked for me who did a lot of dental work, prior to 2015 she started masking up and wearing gloves and eye protection doing teeth work and she actively promoted Hendra vaccination until just before she left me. She would not do teeth work on an unvaccinated horse. That was her decision and I respect it, but I would say up to 2015, and there are other people in this room more qualified than me to make this observation, that the profession as a whole went out to sick horses. We may have asked is it vaccinated or not, we may have treated the unvaccinated horses differently, but we went to them. That litany of problems that has occurred with unvaccinated horses has come in since 2015. I mean, to me it is an association. Just talking to my peers about it, that is the reason why. I have had practitioners literally with tears in their eyes saying, 'I do not want this policy in my practice that I will not attend sick unvaccinated horses, but I'm being forced into it.'

**Mr PERRETT:** Thank you, Dr Squire, for coming along today. I will be brief. In your submission you made some comments in and around the horseracing industry and mandating within the horseracing industry and if that does not happen within the horseracing industry then it is hypocritical to expect other sections of the horse industry to comply. Can you explain your thoughts in and around the horse industry and your knowledge that you have of that?

**Dr Squire:** I would like to make two comments on that. One of my largest clients started vaccinating for Hendra a few years ago. His bill was \$7,000. He did two vaccines and said no more and he just stopped. He was a well-known thoroughbred trainer and breeder and owner. He just stopped after that because the industry was not mandating it, not swinging behind it and not offering some kind of financial recompense. \$7,000. That was when it was twice a year. That was costing him \$14,000 a year. He did it twice and then stopped. The second thing is I have been on well-run non-racetrack equine establishments out in the Canungra Beaudesert area who were doing the right thing, getting their horses vaccinated at substantial cost twice a year, and then as time went on they pointed across the road and go, 'Those guys have got five times more horses than I've got and they're not vaccinated; how do you justify that?' I am finding also within my profession, and I am not castigating anybody here or criticising, but I am just finding some veterinarians are taking the stance we are not going to treat or deal with non-vaccinated horses, but they have a significant number of racetrack clients who are their clients and they are still working with those horses. I just see that that is hypocritical.

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**Mr MADDEN:** Thanks for coming in today, doctor. Just getting back to this issue of what you describe as a litigation problem, can you give the committee some guidance as to how you see the workplace health and safety laws being changed to avoid what you call the litigation problem?

**Dr Squire:** I am going to bounce that one back to you. That is your guys' job. I have no idea. I understand the problem that Workplace Health and Safety has. But what they are doing is telling us that, if we go to a horse that has a temperature and is sick, it is Hendra until proven otherwise.

Mr MADDEN: So you have to suit up.

**Dr Squire:** You have to suit up, take its temperature, send the samples away and either absorb the cost or pass them on. As I said, since 1999, there have been no human infections. I think the profession, until this litigation problem started, was really proactive in preventing the human infection rate. We should be sitting down with the DPI, for example—the people who know and understand animals and how the vaccination program works—to try to minimise it and at least have either some kind of indemnity or sit down with occupational health and safety and try to tell them the problems that we are having with their view that every horse has Hendra until proven otherwise and the facts of life. As I said, before that view from occupational health and safety, veterinarians were seeing sick horses and, now, many practices are not.

**Mr MADDEN:** Is your major concern that you have to suit up once you suspect that it could be Hendra? Is that your major concern?

**Dr Squire:** My major concern in Queensland would be that I am now going to be next on the list of occupational health and safety.

Mr MADDEN: Because you did not suit up?

**Dr Squire:** Because either I did not suit up or—we see horses with a temperature and a cough and a nasal discharge every second day of the week. There would be some other racetrack practitioners here. That is our biggest call-out in racetrack practice next to lameness. Trainers hate coughing horses. They hate seeing nasal discharges. Lung problems are endemic because of the industry. The horses are stabled together. When they are racing they are breathing in dirt and dust. We are fighting lung infections all the time. Occupational health and safety wants me to treat every one of those as a potential Hendra.

**Mr MADDEN:** I think what you are saying is that you want the standard lowered where you need to suit up. I think that is what you are saying.

**Dr Squire:** I think we need more consultation with the government veterinarians in the DPI and occupational health and safety about the reality of life out there.

**Mr MADDEN:** That is pretty much it. I think we are on the same page here.

Dr Squire: Yes, lower the standard. There are some practitioners in this room—

Mr MADDEN: I am just trying to assist you.

**Dr Squire:**—and Dr Lovell is one of them, because of his horrendous experience, who suits up every time the horse has a temperature. I do not.

**Mr MADDEN:** We have had vets in a similar situation who have given testimony to us. Thank you very much, doctor.

Dr Squire: Thank you.

**Mr SORENSEN:** Do you really think that a lot of people now do not go to the vet because of what is the happening? They do not want their property to be—

**Dr Squire:** There is a certain segment of the horse population who are extremely competent horse people and would use vets minimally anyhow. I will give you some examples. I am often the second or third person called in a lameness exam, because the chiropractors go to them first, not veterinarians. I know one or two chiropractors whom I have extreme confidence in. Some people are truck drivers one day and chiropractors the next. There is a sublevel of non-veterinary work within the equine industry. That is something that we all live with and I have close personal friends who do that. They are capable of passing stomach tubes. They are capable of taking blood samples and getting them submitted and reading them. None of this is illegal. All I am saying is that, in some of these cases where owners have phoned veterinarians and have either been refused service or been told that they are going to be charged \$500, or told that they have to wait three days for treatment for the results to come back, have turned around and phoned nonveterinarians to go and see the horse.

**Mr SORENSEN:** I am from Hervey Bay and a farmer had it there. He was more or less one of the neighbours. People really do not want the stigma of it happening on their property. That is why I asked the question. There is a stigma to it. They shut the whole property down. It was mostly a

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canefarm. They were not allowed to go in. The machinery was not even allowed to go in. It was just blocked off. To have that, it just shuts down your whole business. Do you think that people do everything to avoid going to the vet sometimes if they have a hint that it is Hendra virus?

**Dr Squire:** Obviously. I will give you a brief historical example of the mad cow disease outbreak in Europe a few years ago. England and most countries made the parliamentary decision that they would reimburse farmers to the full value of their herd. They wiped out the disease really quickly. France did not. The disease went on and on for months. In France, it was called tractor disease. If a farmer suspected his cow wobbling had mad cow disease, he dug a hole with his tractor and buried it. He did not call in the government. So it kept perpetuating. Is there a stigma? Absolutely.

CHAIR: Thank you very much, doctor, for your time.

Dr Squire: Thank you.

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#### MAJOR, Dr Derek, Veterinarian, Agnes Banks Equine Clinic

**Dr Major:** Good afternoon. I have been an equine veterinary practice for 37 years and for the last 27 I have been the principal of what is now a 10-person equine-only veterinary practice. I have had a number of positions on horse industry and professional bodies, as you can see there. My first encounter with the Hendra virus scenario, as listed in my short submission there, was way back in the early days of Vic Rail when it happened. It was 16 years ago. I was a chief veterinarian to the RAS in New South Wales and I was on duty in the main arena. A guy was riding a campdrafter and he came out of the arena and he said that his horse was not very well and had not been quite right that day. He came from Queensland. We rushed the horse, stumbling, into the track-side veterinary stall and within 10 minutes it was dead. Really, Hendra virus was not much on the radar then.

As a matter of completeness, I had the horse removed to my veterinary practice where I lived with my wife and family. After work I went home and I post-mortemed it. It was not until I had the horse all dismembered on the floor of my veterinary hospital and my kids were saying hello to their father and helping with the post-mortem that I suddenly said, 'Haemorrhagic lungs. Isn't that what they get with Hendra virus?' I was not expecting to find a massive internal haemorrhage. It was not on my radar. My biosecurity was absent, as you can tell. There was no PCR test in those days, but Rod Hoare, who was the special Olympic veterinary officer, realised that it was a crisis and was very good in transmitting samples down to Victoria to Geelong. They did some emergency histopathology and got me off the hook, but I was on the hook for long enough to contemplate Hendra virus in all the shapes and forms that it takes, rare as it is. They started with a commercial risk to the show of just having a horse dropped into the main arena with Hendra virus. What happens to the rest of the Easter show? The human tragedy of me sitting there waiting for histopathology to come through and wondering if the stupid fool had just infected his kids with Hendra virus, the risk to multiple horses—to 600 or 700 horses at the Easter show. It came back negative. I was very pleased, but it gave me a little insight into the potential. Often, the potential now is more serious than the actual clinical cases.

I am almost in a difficult position in the Sydney basin where I am not in the known Hendra endemic area. However, I know that I have the bats and we know we have the virus. So I am a bit betwixt and between. I have to treat things like they might be. If I see a neurological horse, or a sick horse, it causes great distress to me and the clients. I often have their kids paddling around with a horse before they know that it is sick. I am obliged. I would rather keep a little secret, but I have to say, 'This is probably not Hendra, but you need to think about Hendra until we get some testing.' I think the human story is worse than the deaths and the clinical cases we see, which is a point that I would like to make.

I was chairman of Equestrian New South Wales at a time when Equestrian New South Wales and Australia and Queensland were feeling the need to develop a policy. Much as I was a veterinarian, some people thought otherwise as I was on record as being the last person on that committee to feel the need for any Hendra policy at all. I felt that it was a relatively rare risk for our members and that falling off a horse is a much bigger risk. But over time I was persuaded otherwise very much by the legal eagles and Workplace Health and Safety and also a few changes in the landscape.

The changes were that, in 2011, I think it probably peaked, but we could see an exponential increase in the number and frequency of cases. We went from one every five years to a number to getting cases every year until in 2011 there were multiple cases. I think everybody thought, 'This is a crisis happening. We need a policy.' That was one thing. The increasing number of cases and the fact that they travelled further down towards Sydney—they seemed to be moving into northern New South Wales. The original cases were in Queensland. So it was coming closer to our territory.

We also had two cases, and they have been mentioned this morning. I was at the inquiry this morning. Six people were exposed to a horse that they were dragging out of a dam. They did not have any idea that it was Hendra virus. Another horse was treated with antibiotics for a week and it did not have a fever until it died. I thought, 'It's not quite as easy for us to think, "No, we're treating a horse" and do all of the "biosecurity" as I had thought perhaps it might have been.' We felt that what people wanted to do in their own home was their business, but when we brought them to events there was a threshold of risk, where we, as a board, had a duty to the public to institute a control measure. We attempted to devise a matrix where we looked at where the horses had come from, how long they were staying, the proximity of the contact and so on to decide, 'This must be a Hendra vaccinated event.' We went a certain way down that track and history has taken us in a different direction. But that is where I came from.

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As I say, it is all good for me living outside the Hendra zone, but I am very sympathetic to colleagues who are within the Hendra zone and I believe that a lot of my colleagues are genuinely fearful. The risk might be low, but I am sympathetic to people who do not want to be part of that. I do know of some of my colleagues and a number of the junior vets who I have mentored who have said, 'Hey, I don't want to go into horse practice. I don't want to deal with this Hendra thing.' They do not even want to deal with the politics of the Hendra thing, let alone the virus. So they just walk away from it. That is real and I respect people who do not want to treat horses.

I also know the human impact of close colleagues of mine who are under the surveillance of Workplace Health and Safety in Queensland. It is devastating to their lives. It is not just about a fine; it is certainly an effect on them. I think with biosecurity, there is an attempt to say, 'We don't need vaccination, we do biosecurity.' I think biosecurity is great. I think I have probably had a consistent level of biosecurity in my practice, as Dan Lovell has mentioned, for quite a long time with gloves and hand hygiene and so on. I think that is very much a mainstay. However, I administer horse events at the Sydney International Equestrian Centre where the Olympics were. You can write in the fine print and tell people not to kiss their horses on the muzzle, but go there and have a look: they all do. I do not think in the big wide world biosecurity is a substitute for vaccination. It is necessary.

I also was involved in the EI outbreak where we had to dress up in pyjama suits all day every day. I did it for two months and it nearly broke me. It is just not a feasible and practical thing to do in all circumstances. I think the reactions to Hendra virus are wildly exaggerated. We are all talking about numbers. I should say a reaction to a Hendra virus vaccination is desirable. That is what we want. That is why we give the vaccine. The vaccine includes an antigen in there that is designed to make the horse react to it. It is foreign and it is supposed to react. What we are saying is an unacceptable level of adverse reactions. When I use the vaccine, I say, as the label directs me to, 'Transient muscle swelling and soreness for 24 to 48 hours are not uncommon but, anything more than that, we need to talk about.' That is very similar to any other vaccine—tetanus, strangles; penicillin shots, for that matter. You will get the same sort of thing happening. I do not report them every time I see them. That is within normal limits.

I personally attended two reactions and I make a point in my practice of trying to go and see them. I have attended two out of some possibly 4,000 shots that we have seen. I am aware of a few other anecdotal reports of situations that I find very hard to relate to the vaccine, but they are juxtaposed to the vaccination. But there are two that I saw that I think were unpleasant. If I were that horse, I would not want to have a Hendra shot again. That is the only two I can recall personally.

In my role as a veterinarian on the Equestrian New South Wales board, I was involved in transmitting reports of a number of other cases because they often came to the board. My method was to go straight through to the Zoetis technical staff and I have to say they follow it up. They requested the owners' contact details and asked if it would be in order to contact them and in that case I said, 'I'm sure they would like a call.' To the best of my knowledge and belief they attended it promptly and punctually. To be honest, I think they were very concerned to follow them up and get involved because it is commercially desirable for them to be aware of what is happening with their product.

Just working through my report, I personally believe that we are at a bit of a turning point with current vaccinations at the moment. I was at the inquiry this morning. I heard the suggestion that the 75 per cent vaccination rate has dropped down to 30 per cent. I think that is probably fairly similar in my practice, and I do not believe that is out of fear of vaccine reactions: I think it is because we are losing direction as to the necessity, the vaccination interval, the impact of vaccination, how it will be viewed by the Chief Veterinary Officer and so on in the face of an outbreak, whether event managers require it, need it or whatever. I think people are looking for direction, and I as a veterinarian cannot provide it to them at the moment.

I think that a key thing is for us to develop a way forward now, and I have been a little bit instrumental in trying to put together a committee of relevant experts to determine some advice that we can give to event and venue managers, which would include veterinary practices as well, so the management of the Sydney International Equestrian Centre, people that run endurance rides, three-day events and so on. They knock on our door and they ask for guidance, and I think we need to get some practical guidelines. The two terms of reference for this proposed inquiry would be (1) what is the risk profile of a horse coming to an event for Hendra virus so that we can identify to an event or venue manager the horses that they need to consider some sort of protection from; and then what they would regard as the definition of a Hendra vaccinated horse. I think we are going to increasingly find that, much as Zoetis are required to stick to a label claim—that is all they are allowed

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to do, and they have to stick to the claim that they have registered and is supported by their research—I think as a veterinarian we can go off the label, and I do not believe that some of these horses that have lapsed from immunity will need to have their courses started again.

I have talked to the relevant immunologists and so on, and they share my view that there may be another way forward where we can define a low-risk protected horse either by way of its vaccination history or by developing a simple and cost-effective and accessible measure of the horse's immunity. In other words, do something—which is what we did when equine influenza was around. In 2007 we had a thing called a certificate of immunity for those people who did not want to vaccinate their horse anymore because it had had plenty. 'It got a lump last time and I don't need to because it's protected. It has antibodies.' This has many precedents in human medicine; for example, women having babies need to know if they have a rubella teeter, and if they do not we vaccinate. I think we can develop a similar situation with horses.

In conclusion, I would like to recommend that this committee consider these two initiatives. One is to support event and venue managers who wish to institute a vaccination policy. That is one of the wobbly areas at the moment. The second thing I would like this committee to consider supporting is the initiative that I have outlined there. The chief executive of biosecurity New South Wales, who is Bruce Christie, is prepared to chair this committee. We have eminent virologist and bureaucrats on board with that committee to try to develop that definition of the two terms of reference (1) what is a high-risk horse; and (2) what is the definition of 'adequately protected'.

**CHAIR:** Do the biological and workplace health and safety controls in New South Wales differ much to what we have in Queensland in relation to Hendra virus?

**Dr Major:** In most cases New South Wales tends to mirror Queensland initiatives in terms of workplace health and safety and DPI guidelines and so on. I think New South Wales health and safety, to my observation, has not been as aggressive in pursuing that as they are in Queensland. I think the same policy still applies. There is nothing unique about the Queensland approach.

**CHAIR:** You said you have only had a couple of reactions, and you were quite concerned about one so you made sure it went to the manufacturer of the vaccine. What information is given in the recordings? Is it just in a paper form? Are photos put on a database? Can you just explain that to the committee?

**Dr Major:** I think, as has been outlined earlier, there is a web page where an owner, a veterinarian or anybody can report an adverse reaction. I have chosen to do it through Zoetis, and it has been in the form of a written report which goes by email. It is a clinical examination of my findings. When you say I was concerned, I was not actually concerned for the life of the horse, for example, but it warranted further treatment. It was what we have talked about: a horse that did not want to bend over and eat and drink was suffering with it more than I would like to see a horse suffer, as opposed to a human that has a cholera shot or an influenza shot, like I had the other day, and gets a little bit of swelling. That is well within normal limits, in my observation, and would not be reported any more than if it had a penicillin shot and it had a little lump there the next day, or a tetanus shot or a Pentazine shot or whatever.

**CHAIR:** The reason I ask that question is because we have heard over the last two days that not one person who has reported to us has ever received any feedback from anyone in relation to a reaction that they have had from a horse. In your statement you said that Zoetis was quite concerned when you approached them about this horse. Did they contact the people concerned and want to know more about the horse?

**Dr Major:** To the best of my knowledge and belief they did. I do not know how many people you have heard in this inquiry, but we are talking about 4,000 horses vaccinated in our practice. A lot of people had horses vaccinated, so I do not know that it is fair to say that they are not represented in this inquiry.

**CHAIR:** The inquiry has heard from just about every person who owns a horse—

**Dr Major:** I do know one where we definitely had some continuing dialogue with them afterwards, and this is what I regard as one of the absurdities, if I may use the word, of the current situation. This lady desperately wanted to keep her horse protected against Hendra virus. It had dropped off the register because it got a sore neck and the only advice that they could and were allowed to offer was, 'You have to start again.' We had ongoing dialogue in that case. That is one out of two that I know had further feedback. From my point of view it is very frustrating for me. If people say to me their horse dropped out and so on, I say, 'Please, we need to know about that and so does Zoetis, because we need to do a post-mortem.' We need to know why. There are all sorts of things,

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like people saying all their mares aborted their foals and my retort is, 'Please, whenever a mare aborts a foal I want to know why, for your sake, whether it is or is not that. If you think it may be associated, it is critical that we know.'

CHAIR: Do you know if there is a hotline that people can ring?

**Dr Major:** I believe there is a hotline on the website, but it has been a long time since I looked at it. They have an annual report and they list all the adverse reactions to everything in the public domain, not just Hendra.

**Mr MADDEN:** In paragraph 8 of your submission you refer to a 'Hendra zone'.

**Dr Major:** 'Hot zone' is in inverted commas because that is one of the poorly defined areas at the moment. I would envisage the committee that we are working on at the moment trying to get a better definition of the 'hot zone'. It has been defined in various ways as the partial protection board in which a horse has died of Hendra—which is not all that rational—postcode district, DPI district—in other words, a bat's flight from a known case—the habitat of the black bat. A number of different proposals have been put out there about the 'hot zone', the Hendra zone. It is ill-defined at the moment and I think it needs further definition.

Mr MADDEN: What would be the primary purpose of identifying the 'hot zone'?

**Dr Major:** Just looking closer to home, I give advice in my position on the New South Wales equestrian board. We hold a lot of national events where horses come from Queensland, Western Australia and South Australia and we have to identify horses that we might consider pose a risk of coming to the event bringing Hendra to the event or spreading it to other horses or people at the event.

Mr MADDEN: The Hendra zone you are talking about is part of New South Wales?

**Dr Major:** It is eastern Queensland and north-east New South Wales. It goes down about as far as Kempsey, yes.

**Mr PEARCE:** Over the last couple of days reading through the submissions, this old country bloke is struggling a little bit to understand. There seems to be an overwhelming argument for vaccination by vets, and most vets are saying that they are only getting very little reaction like a lump or a sore throat, maybe a bit of a wobble; while many who were once pro-vaccinators, people who did support the idea of vaccination, have had a serious adverse effect and do not want to take it up any further. Can you tell me what is going on here? Why do we have this situation where we have one presentation in favour, and we have a lot of people who used to be pro-vaccination but are not now because of adverse reactions? Who is telling me the truth?

**Dr Major:** I think everybody is telling the truth as they know it in their eyes, and I think the people that have been very close to anything going wrong with a horse are going to be coloured by that opinion. If a horse has a very serious reaction one would hope that it would be reported and investigated right to the end. This is in fact part of my initiative in the last paragraph. I want to be able to say to that person, 'I can see that you do not want to vaccinate your horse again. You may not need to. It may be that your horse has reacted so well to the vaccine that it has lots and lots of antibodies. All we need to do is to prove that it has, and we will not have to go back and vaccinate again.' I think this is where we are getting at loggerheads and this is where we have this little standoff. I can see those people, rightly or wrongly, genuinely not wanting to vaccinate that horse again and perhaps their friend's horse and their neighbour's horse.

I think that social media have not been very kind to the cause. I think they have been in the wrong place at the wrong time. I think a lot of what we hear in social media is, 'My friend knows somebody who said', rather than tracking them down and saying, 'Show me your horse that has had the reaction because I would love to come and have a look.' I would be the first person who wants to investigate any of these cases. I started off by talking about the dead horse. I want to know. If things go wrong, I want to know. I think we have this dichotomy with people coming from their own perspective, and I am very sympathetic to those people. As I say, I mentioned one lady earlier who desperately wants to keep her horse vaccinated but she is fearful of what might happen next time. I want to provide another avenue where they can demonstrate the horse has plenty of protection and does not need any more vaccination. I think that is the way to break the two sides to that argument, as you say. I think people get more and more emotionally involved on both sides of the fence. Is that a sufficient explanation? It seems very logical to me that people are very emotional because it is a very emotional topic. It is about sick horses, sick people, dying people, sore necks, colic and everything else. People are emotional about their horses and about themselves.

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**Mr PEARCE:** The way I look at it, I think both sides of social media have some explaining to do. I definitely think that vets could have handled the whole situation a lot better as well, the way they explained things to the community. What can vets do to improve the situation? I can see a lot of vets losing clients simply by the way they have been treated.

**Dr Major:** Within a practice vaccination rates have dropped off simply because we are not giving them direction. I am not giving them direction because I do not have a direction because we do not know the policy of the places where they might want to compete. We do know the policy of the Chief Veterinary Officer in New South Wales and Queensland, which is that they will not accept any vaccination that is outside the rigid framework of the manufacturer's claim. I think my clients are not necessarily falling off because they are scared of reactions.

What I do in terms of notifying my clientele, we do have email and hard copy newsletters that factually talk about Hendra virus, that there is a small risk, there is a vaccine available and so on. We do it by email and we do it this way. We do it on Facebook. One thing that I did once, and I will not do again, is buy into some of the Facebook debate because if someone like me puts my hand up and says something about that, it just ignites another round of hostile response. That is where I go with it.

I am a little concerned about the department of agriculture, frankly, getting too involved in this melee as well, because I think they might get a little bit burnt too. Obviously they are there to present the objective facts as we have them, but I find that it is hard to win a very emotional argument like that in social media.

**CHAIR:** Thank you very much. I now call Ms Donna Anderson. I apologise, Donna, for skipping you before.

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#### ANDERSON, Ms Donna, Private capacity

**CHAIR:** Please be mindful that we are running very late. Can the remaining speakers keep their opening statements relatively short, if possible?

**Ms Anderson:** I have a diploma in education and have worked for 10 years as a project engineer. I have worked as a part-time equine hoof trimmer for four years in this area. I own four unvaccinated horses in the Redlands and I have lived with horses in the Redlands for over 20 years. I am pro-choice. I speak for the horses who cannot be vaccinated and for those who can no longer be vaccinated. I am a member of the Facebook pro-choice Hendra vaccination page, but I have only been an active member of this group since March 2016 when I was told by my local vet that I would have to agree to vaccination prior to treatment.

I do not want to go over my submissions. The letters outline my reasoning as to why I do not want to vaccinate my horses. I would like the government to say that horse owners have a right to choose. I would like people to feel safe and comfortable when treating my horses, but to vaccinate is so dangerous to my horses. There are a group of horses that cannot be vaccinated and I believe that there are also horses that could have developed immunity problems from the vaccination. Is it possible through the use of a stall-side test to gain a level of safety and peace of mind? As per the recommendations of the person who designed it, the test is accurate for horses just two days post infection. We shall accurately know within one hour if a horse has any of several infectious diseases that the horse could be presenting.

Ross River virus is also a zoonotic disease. I did not realise it and my horse was undiagnosed with Ross River for three years. We would know in one hour instead of two to three days whether a horse tests positive for Hendra. Could there be a group of adequately trained consenting veterinarians who would feel happy and safe to attend non-vaccinated horses and horses that are given the initial dose rate, which Dr Middleton initially prescribed, if things like PPE, titre tests and the stall-side test were readily available as then our veterinarians have choice just as horse owners have choice in this seemingly enforced vaccination rollout?

I cannot say exactly what happened but I believe that a horse got hit by a car possibly in North Queensland and six vets declined to attend because they did not feel safe. Of course the next question is that, if the stall-side test, titre testing and PPE are the agreed upon tools in the veterinarian's toolbox, are we going to be able to keep the vaccination on the shelf? When you go to the doctor's surgery and you get a tetanus shot, you are covered. You are covered for three to five years. If the antibody levels are up high on our vaccinated horses, how can you be not covered the following day? Dr Deb Middleton said that the level of 1-16 is sufficient cover against Hendra, so how can it not be the next day?

In going over the procedures of the data collection of the product, a titre level of 1-16 is sufficient to cover the Hendra virus. We know when we are given a tetanus injection that it takes three weeks for antibodies to rise to the point where we are covered for tetanus. This I have been made aware of is known as a titre count. It is the immunity that we have built. We are being told, in effect, that our antibody level can be high today, clearly showing that we are covered, and then tomorrow it could be zero. When we are vaccinated for tetanus, once we have the antibody level we are covered for two to five years.

How can Dr Middleton say that the 1-16 level is cover for protection against Hendra. When two horses after two primers and one booster shot can have titre levels of 1:2048 and 1:1024, their antibody levels at this magnitude cannot possibly be zero the next day because we understand and know that we are protected against tetanus for that given period of time. We are, however, now aware through education that it is not always the horse with the highest titre level that necessarily is the one that has the reaction to the vaccine. The horses with lower titre levels can be the ones that possibly display the reactions. Therefore, we cannot predict which ones will react and which ones will not. But tomorrow the horse does not have any cover at all? How can we predict that a horse will react? Perhaps this is why Dr Middleton initially stated that a horse only needed the two initial priming doses to provide lifetime cover but later the recommendation of a single booster was added. Could it be in the initial trials that not only would this give the horse lifetime protection against Hendra but also it would remove the unpredictability that those animals might react as a result of overvaccination?

For those people who are unable to vaccinate their horses now and for horses that can no longer be vaccinated in the future and in knowing that by following the recommendations of Dr Middleton the vaccine potentially becomes no longer available, could we look at the possibility of some kind of educational support program? I have a horse with Ross River and it is in his body for life. If he gets Hendra, he will be dead but what will the vaccination do to him? How do I know it is

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safe to give it to him when we know Ross River causes autoimmune disease? There are no studies to help me make an informed decision, but I do not want to put my vet at risk, so how do I proceed? Is it possible to have some protocols in place for me to follow when my horse gets sick? Where do I go to learn about infectious disease? It was only through reading about Hendra that I realised that Ross River is also a zoonotic disease. Can I phone support staff or properly trained vet nurses who specialise in infectious disease situations if I have a question, as I prepare for an infectious disease scenario?

A set of procedures would be handy or possibly a checklist to follow that helps me to identify at the earliest possible time when my horse is sick or documentation that I could turn to which shows me what PPE to use, how to wear it and how to use it safely around my horses if an infectious disease is suspected. I definitely do not want to put my veterinarian at risk. Are there things that I can do to make it safer for myself, the veterinarian and other people and horses? What tools and equipment will be needed? Can I take some of the duty of care back from the veterinarian and become responsible for my own actions in performing duties such as administering drugs when I care for my sick horse?

In relation to Dr Joanne Macdonald's work, we have been told that it will cost approximately \$500,000 to bring stall-side testing from its current position to being able to be used in the field. The stall-side test can give us an accurate result within one hour. Therefore, in stating if it is or is not safe to treat a horse. The shorter turnaround time frame for a result is highly significant. The exclusion test result takes two to three days and the stall-side test takes one hour. The two- to three-day time frame of the exclusion test is the reason why approximately 87 horses have died whilst waiting on the return results. For less than the cost of a house, can the situation we are in now be solved that, along with education, not only covers the horses that cannot be vaccinated but the horses who no longer can be vaccinated?

Veterinarians and owners feel like they can no longer provide the vaccination due to the vets choosing to only use the vaccination according to Dr Deb Middleton's recommendations of its use. For less than the cost of a house, we have a solution, along with education, for horses that cannot be vaccinated and for horses that can no longer be vaccinated. Then, if the vaccinations get pulled, we have a solution for that too.

**CHAIR:** Thank you. That was quite a thorough report. We have no questions. I now call Dr Patricia Clarke.

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#### CLARKE, Dr Patricia, Veterinarian, Manly Road Veterinary Hospital

**Dr Clarke:** Good afternoon. Thank you to the chairperson and the committee for allowing me to speak today. My name is Trish Clarke. I am a veterinary science graduate from the University of Queensland. I am also a retired educator from the vocational education and higher education sectors. My current employment is that I work part-time as a training coordinator for Manly Road Veterinary Hospital, which is a large veterinary practice—small animals and equine. I work for a very large veterinary practice bayside Brisbane. It is primarily small animals with an equine unit. I think having worked there over the past 12 months I have certainly gained a significant insight into the Hendra virus situation and its impact on the veterinary profession, clients and, of course, the animals.

I am here today in support of the Hendra virus vaccination and also of the veterinary profession. In doing so, I believe I am also here in support of the owners of horses and the welfare of horses. Basically, from what I can see in my daily practice at the veterinary practice, the equine veterinarians are under considerable stress trying to manage this whole situation. In every case that is put to them they have to consider the risk of exposure to Hendra virus, particularly if the animal is unvaccinated, and they do not take it lightly. Their utmost aim is always the health and welfare of the patient. Certainly the Hendra virus scenario has really complicated things. As a veterinarian, I have a very sound appreciation of the efficacy of the vaccine and the fact that it has been developed by an esteemed organisation, the CSIRO, and it has met the rigorous standards of the Australian Pesticides and Veterinary Medicines Authority. There is no doubt about that.

One of the issues that has been raised is the cost of the vaccination as an impediment. Personally, I do not believe that is an issue. I know from where I work, the veterinary practice principals have done their very best to minimise the cost to the client. That is because, obviously, again their main purpose is the health and welfare of the animal and supporting the client. Basically, the practice that I work at charges just barely above cost price and they will travel 30 kilometres to a horse without charge, basically, for vaccination, because like I do, they believe that vaccination is the single most important way of preventing this terrible disease.

The other area I would like to speak about today is the workplace health and safety perspective, which has been covered by several other witnesses. Because all veterinarians are trained as scientists, we like to base our opinions on evidence based on research, which is what I did. Basically, I approached a safety consultant who is also an engineer and an economist. He has had a prolific career in the workplace safety arena, often being an expert witness in relation to workplace accidents. I had an extensive conversation with him. It is my belief that the current approach by Workplace Health and Safety Queensland, which is quite litigious, is not necessarily the best approach to this situation if we want the best outcomes for everybody. As many previous speakers have said today, I do believe that communication and cooperation of all stakeholders will have the best outcomes for this situation.

The person I approached was a Mr Geoff McDonald. He has worked in the area of safety for many years. In fact, I first met him in 1986. I was referred to him by Des Sturgess QC, the director of public prosecutions at the time. Geoff was saying—and I think this is extremely applicable to our situation with Hendra virus—that in terms of a person sustaining personal damage at work, the greatest impacts on the community financially and in terms of pain and suffering arise from the small number of cases categorised as class 1 damage. You will notice he says 'small number of cases', which is exactly what we are dealing with here, but every life counts. Class 1 damage involves permanently altering a person's life through a fatality or full or partial incapacity. Those are all possible consequences of Hendra virus, which I am sure the committee has great knowledge of.

According to Geoff, to minimise the potential for class 1 damage to a person, solutions should if possible come from the upper three levels of the hierarchy of control. This is very much a workplace health and safety principle where we have levels of control for hazards. The top level is elimination. We are very fortunate that we do have a tool for elimination and that is the vaccine. Moving on from there, Geoff says that the lower levels 4 and 5, which include things like administrative controls and PPE, are the lowest levels. They are actually not a very good solution, because they require constant input and monitoring to remain effective. Later on I will mention that here we are dealing with humans and we have human error.

Therefore, it can be concluded that when you are talking about a zoonosis like Hendra virus, which is potentially fatal to humans and definitely horses, relying on PPE—a level 5 in the hierarchy of control—is just not effective enough to keep people safe. That is whether you have trained veterinarians or whether you have horse owners. It is just not good enough. Current experiences with Ebola virus have proven how easily breaches in the use of PPE can occur, even in highly trained

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staff. I have a veterinary colleague whose husband, who is also a vet, has worked in Liberia in the past 12 months with the Ebola outbreak. In conversation with her, she basically said that with the PPE used for Ebola, which is virtually the same as vets use for Hendra, they now stipulate that when personnel are putting on that PPE they have to have another trained staff person to monitor that they are actually doing it correctly. This is the level of skill that we need for PPE. I believe that key stakeholders—the Australian Veterinary Association, Biosecurity Queensland, and Work Health and Safety Queensland—need to work together cooperatively to find a level 1 solution to the Hendra virus problem. In my estimation, that is mandatory vaccination of all horses in at-risk or high-risk areas.

The other point that Geoff McDonald makes, and he is an expert in safety, is that the Hendra virus problem should be an opportunity for creating a positive change for the future, not blame for the past. That is why I think that the litigious approach of Work Health and Safety Queensland is not appropriate, particularly at this stage where Hendra virus is still an evolving situation. We are all still learning. We should be working together for optimum outcomes, not trying to create impediments. All stakeholders are still learning. The situation warrants open communication amongst stakeholders that will facilitate growth in the knowledge, understanding and skills required to develop and implement effective solutions.

According to McDonald, it also needs to be acknowledged that worker error is not always a result of carelessness or negligence, but rather a reflection of normal human behavioural characteristics. Human error in the workplace can be attributable to factors such as fatigue and excessive heat, for example, both potential consequences of wearing full PPE for Hendra virus in Queensland. Therefore, in addressing the current Hendra virus situation, it is recommended that all stakeholders focus on change for the future, not blame for the past.

Therefore, I conclude that key stakeholders, which would include the Australian Veterinary Association, Biosecurity Queensland, Work Health and Safety Queensland and Queensland Health, plus representatives of the horse-owning population need to work together cooperatively to bring about a level 1 solution to the Hendra virus problem. One of those recommendations would be support for mandatory vaccination in high-risk areas. The second recommendation, obviously, is to promote increased collaboration and consultation with the key stakeholders, to work together in the best interests of the health and welfare of horses, the safety of the general public and the safety of veterinarians. Veterinarians in equine practice are virtually putting their lives on the line every day of the week. I see it from my perspective. I am not an equine veterinarian, but I work with them. I know how dedicated they are. I know how seriously they take this and I know how they think about absolutely every case they deal with.

CHAIR: Thank you very much. Are there any questions from the panel?

Mr MADDEN: Dr Clarke, it is possible to over vaccinate a horse with Hendra vaccine?

**Dr Clarke:** I will be answering this from my perspective as a veterinarian and what I know. I am not an equine veterinarian. They do say in certain circumstances that it is possible, but I would not like to actually make a judgement on that with the current knowledge that I have. I would like to research that further. I gather from my interactions with those who are experts in the area that it is not the case at the moment.

Mr MADDEN: You are recommending mandatory vaccination in high-risk areas?

Dr Clarke: Yes.

Mr MADDEN: Can you give me some idea of what the high-risk areas are?

**Dr Clarke:** Again, from the knowledge that I have at the moment, I believe that the high-risk areas would be the eastern seaboard of Queensland—

Mr MADDEN: Inside the Great Dividing Range?

**Dr Clarke:** Yes and northern New South Wales. I know there has been one case at Chinchilla, west of the Great Dividing Range. I would think that would be a good starting point. It is not a simple solution, because you have a lot of mobility of horses. Again, that would have to be coupled with things such as mandatory vaccinations for events and things of that nature, as well.

CHAIR: Thank you very much, Doctor. I now call on Dr Christine Kidd.

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#### KIDD, Dr Christine, Practice Principal, Manly Road Veterinary Hospital

**Dr Kidd:** Thank you for the opportunity to speak. Thank you for holding this committee meeting, because the value that will come out of this committee is immeasurable. My name is Christine Kidd. I am the practice principal from the Manly Road 24-hour veterinary hospital. We have a staff of around 70, which includes vets, vet nurses, office support staff, et cetera. As part of that hospital, we have an equine unit, which is constantly on the go. I am passionate about the risks of Hendra virus. Having known both veterinarians who died, having met and interacted with Vic Rail, the horse trainer, on a very few occasions, having known Mark Preston of Mackay whose wife was the veterinarian who died, the effects emotionally to me are pretty high, but I try to maintain some sort of sensibility out of it all. It brings me to a very important point: as the practice principal, I believe my moral and legal obligations are to provide our staff and clients with a safe work environment. I do not want to be in a situation where I have to tell the parents of one of my young vets that they have Hendra virus. To do this, we have introduced a policy of not attending unvaccinated sick horses. This hurts, because our whole reason for being a veterinarian is to attend and alleviate the sickness and suffering in our patients. However, our obligation to our people, whether they are clients, clients' kids, our veterinarians or staff is much higher than our need to meet that emotional part of us.

It has been repeated numerous times during what I have heard this morning that vaccination is the single most effective way of protecting horses and subsequently humans from Hendra disease. In the submissions, people have raised issues with the vaccine. There have been comments about the drug companies and vets, that they are pushing it for financial reasons. Personally, I think we should be extremely grateful that a company picked up the vaccine from CSIRO and put it into action and gave us a product that protected our horses and our people. I do not know the maths or the finances or anything of Zoetis, but I do know that they produce products such as the heartworm vaccination for dogs, the injection for dogs. When it was first released, not by Zoetis but by another company in the states, within something like three days it had raised approximately \$1 million in revenue for the company and it has grown exponentially since then. I think this vaccine that they have, probably in the scheme of things for the company, is small bickies. We can just be grateful that some company has taken it on board.

The other thing that has been said is that vets are pushing it for financial gain. I do not believe this is the case. We have taken the stance that if a horse is unvaccinated we will not treat it. We have taken a dive in our income by something like 30 per cent. Who does that if they are concerned about the financial issues? We vaccinate horses at minimal cost—and many other vets and my colleagues I have spoken to do, as well—to maximise the protection for the horses, for the patients that they treat, for the owners, for the owners' kids and for themselves. For example, we pay the drug company \$65.85 for a vaccine dose. We charge our client \$88. To leave our practice, travel up to 40 kilometres, vaccinate the horse and go back again, it is \$88. There is no additional cost at all. Whatever that works out at, it is \$15 roughly that we are paying for a bit of petrol. Certainly we are not paying for the vet's time, our insurance, our phones or the booking. We are just trying to maximise the number of horses out there that are vaccinated. I do not believe that vets are in it and promoting it for financial reasons.

The side effects have been talked about at length. All I can say is that in our practice the side effects, I repeat, have been minimal. There would be the stiffness and a sore neck. A bit of butazolidin and the horse has improved and all is well. We have not had any major dramas like dead horses or anything. I think if each and every case of those were investigated as best it could, we would find that the Hendra virus vaccination is not the issue. I think at the moment if somebody says, 'My horse is sick,' whether it is a week, two weeks, or two months post vaccination, the vaccine is blamed for the condition. That is a tragedy.

People have said that vets just have to wear PPE and be safe. We all know that it does not work and that it is too hot. The vet is just about exhausted with heat stroke in the middle of the Queensland sun. The horse has shed the virus before they are showing signs. People are exposed. Trish Clarke mentioned the Ebola virus and the breakdown of PPE. In those cases I think it is sad, because sometimes there is going to be a horse shedding and there is going to be a little kid who comes home from school in the afternoon and cuddles their horse and we get our first child Hendra virus case. I think, hopefully, we will sit up and watch out then. Somebody said in one of the submissions or somewhere that only vets get killed with Hendra virus. Vets do not have some special quality that makes them more vulnerable to Hendra virus than anybody else.

Another submission said that the vaccine was not trialled or researched properly. I think we have heard that it was done by a government body, namely, CSIRO. It has been approved by APVMA. I do not think that we can get better than that. One submission made some comment about the Redlands

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labelling that says that it is not fully protective, so their horses are being used as guinea pigs. I have the label here. This is what is said in most vaccinations whether it is for dog distemper or cat feline enteritis. It says words to this effect, 'It is an aid in the prevention of clinical symptoms of the disease,'—of course, Hendra virus in horses. It is an aid in the prevention. No company, no APVMA, would ever say that it is 100 per cent the answer. It is just words. Unfortunately, people have misinterpreted that.

As to the cost of the vaccine being too high, I have discussed what our vaccines are worth. The cost of owning a horse is quite high. I spoke to one of our staff. I said, 'What does it cost you to feed your horse?' She said, 'Between \$60 and \$80 a week and that's because it's on a full pasture, anyway.' The farrier costs her about \$100 every four to eight weeks and that can go up much higher than that. The saddle she was using last week was a \$2,500 saddle. A vaccine of \$100 even, or \$88 in our case, is little, but it seems to me that a lot of the resistance is the cost of the vaccine.

What concerns me somewhat is in our practice we have some young vets. Young vets are like kids who get their licence. They think they are invulnerable. They think that they can hop behind the wheel of a car and drive. Our young vets think that they are not going to get Hendra virus. They are not going to be worried. This morning, we had a vet go out to see a pony that had neurological signs. They were from England via South Australia. They are doing a long locum with us, hopefully longer. We have drilled them in Hendra virus worries and concerns. When she got back from that call the head vet in the equine section said, 'Did you consider Hendra?' and she said, 'I didn't even think of it.' So we had to go out and get samples from that horse and we will not have the results from that particular horse until five or six o'clock tonight. That is lucky, because it is a week day; it is not a weekend. So we are living and the owner is living with that fear currently. We live with that fear 24-7. I had phone calls from a vet last night—again, young vets. There is nothing wrong with young vets, but they are still not comfortable in what they are doing quite often and I am talking to them at nine o'clock last night supporting them in what they should be worrying about with another potential case.

I just want to say in summary that the vaccine is safe. There is no question that the vaccine is safe. It gives the best security against the threat of Hendra virus infection in people and horses. We will not be negligent. Our obligation is that the gold standard of protecting people and horses is the mandatory vaccination of all horses in at-risk areas—no question about that. It is as simple as that. Thanks again for your time.

**CHAIR:** Thank you. Can I just clarify a couple of things there? Your clinic is no vaccination, no see?

**Dr Kidd:** If they are unvaccinated, sick horses—you might get called out for a sarcoid. We will say, 'We'll come and look at the sarcoid, but we will only see it if we can give it its first vaccination,' because it might need treatment for that sarcoid down the line and we have started the process. People ring for a dental and we will say, 'We will come and do the dental, but we have to tell you that we need it fully covered before we'll actually put our hands in that horse's mouth.'

**CHAIR:** You just discussed a case that ran through your clinic of neurological tissues. Was the question asked, 'Is it vaccinated? Could this potentially be Hendra?', without sending out a new vet to potentially get contaminated?

**Dr Kidd:** This is the problem. Somebody like me constantly lives with it—not that I currently do equine work; I used to. They had forgotten about it. It had just flicked past their minds. That sounds terrible that the person should do that, but that is the reality.

**CHAIR:** But is it not your practice's rules and regulations that you do not go in those circumstances?

**Dr Kidd:** They had broken every rule in the book, yes.

CHAIR: Thank you.

**Mr MADDEN:** I am going to ask you a question that I asked the previous submitter but just in a slightly different way. Is it possible that overinjection of the vaccine could result in any possible long-term ill-effects to the horse?

**Dr Kidd:** Not to my knowledge, no. The vaccine, you inject it, the horse reacts, gets an immunity. It is not like you keep building up a level of other drugs, no.

**Mr MADDEN:** Thanks very much, doctor. **CHAIR:** Thank you very much, doctor.

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#### ALLEN, Mr Robert, Private capacity

#### **ALLEN, Mrs Sarah, Private capacity**

**Mrs Allen:** Good afternoon, everyone. I am from Ebenezer, west of Ipswich, in case you do not know. I am just a genuine horse lover, not a scientist who has had the training for Hendra like previous speakers. My family have been in the business of breaking, training and selling horses for 36 years in Victoria. We have ridden and competed all of our lives.

My concerns are how to move forward with this Hendra vaccine, which has proved already to create enough problems after administration on certain horses, mine included. We come together this week to discuss the Hendra vaccination debate that has been raging—how to protect horses, vets and owners. We moved from Victoria in 2014. We never imagined owning horses in Queensland was going to be this hard. We thought that we had no reason to vaccinate after we moved until the no vaccination, no treat policy became clear—that if we did not vaccinate our horses, they may not receive urgent veterinary attention if necessary. After learning more about the bats' movement in Queensland, we cut down four massive trees that had housed the bats on a brief visit and we also built shelters over the water and feed bins in the paddocks. We also had two paddocks set aside for bat times that have no trees for the bats to roost in over the horses.

So our three horses were done. Two fillies have had three doses and last week prior to their fourth vaccination we had them titre tested to see their levels of immunity. I might add that this test cost my husband and I \$940. Doctor Middleton has documented that a reading of one to 16 is a positive cover. These two fillies have a reading of 1,024 and 2,048. To make it clear, they had their initial priming doses, followed with the six-monthly booster and then the blood is taken for the titre test just prior to their 12-monthly recommended vaccination. I have the results of the titre test done by CSIRO in July. I am no scientist, but to me I cannot imagine why, in several weeks, these fillies need to be revaccinated to bring them in line with the 12-monthly ruling. The world is lately recognising that overvaccinating is now a problem. Without further research into the regular revaccinating of our horses, the refusal to vaccinate will continue and the reactions will increase.

Our third horse, a competition showjumper, had her initial three doses and then had to have her fourth vaccination to bring her in line with the vaccination policy to compete at the Ekka this year. The night following her fourth vaccination her legs swelled up and remained that way for approximately two months. Although this is not life threatening, it has created problems for a competition horse. She also developed an itch that two rounds of cortisone could not settle and she remains to this day not able to go into a paddock with trees, because she will rub herself raw. Our gut feeling tells us that her next vaccination could make her react much worse—or it may not. Should I take the risk? Our competition horse, in our opinion, is probably the best young horse we have ever owned and we have no doubts that her ability will include the Ekka again, Sydney and Melbourne royals and the Australian championships into the future. If we do not risk her health with a further vaccination, we will not be able to fulfil our plans for her career and it would destroy us if we had to sell her south where she is not under the threat of a vaccination reaction. To keep this mare we love so much without vaccinating further, we risk her health and safety because any ailment, and particularly colic, that will not be treated by a vet could result in her death. On the other hand, to vaccinate means further risking a reaction that, in our minds, is enough to change a horse's physical and performance wellbeing.

I am very disappointed today to not hear anything really, except from Donna, on the stall-side testing. In our opinion, if the release of the stall-side testing by Joanne Macdonald was sooner rather than later, the vets could safely test and then treat unvaccinated horses and the owners would choose to not vaccinate or vaccinate if their case is so needed, putting vets out of immediate danger. I believe that the funds needed to be put into this is approximately \$500,000. If the money wasted on the annual New Year's Eve fireworks was put towards a better project, like the stall-side test, it could be very urgently introduced to save horse's lives and protect our much needed veterinary profession.

My medical knowledge is limited, but I have never heard of a GP, who is the first point of call, refusing to examine a patient until testing is done to eliminate a contagious disease without taking precautions. Obviously, when a person contracts Hendra, as in Natalie's case, she is not going to be euthanased. Natalie is my friend. The choice would be to monitor and research Natalie's health to establish some information on how she survived. Why are horses not given the same chance and respect? The risk of vaccinated horses still shedding the virus is well documented and therefore can create the same unsafe situation if no PPE is used. The stall-side testing in our opinion is the only way to protect all horses in Queensland and New South Wales. I thank you for your attention.

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**CHAIR:** When your horse presented with the swelling in the legs obviously you called back the vet to come and have a look.

**Mrs Allen:** I sent him a message. I have a photo of it on my phone. I did not hear back from him. But I did also report it in the adverse reaction site on the website on the Hendra, but I have not heard back.

CHAIR: So you haven't had a second opinion on what the condition is?

**Mrs Allen:** No. She was stabled constantly, she was worked the same, she wasn't competing in those few weeks prior to pick up anything. That night her legs just blew up—four legs. Not like what we horse people call a normal virus, you know, where one leg blows up and then tomorrow another leg, they all blew up together.

**CHAIR:** And it is still the same condition now?

Mrs Allen: No, no. She is back to normal now, yes.

Mr Allen: Except for the itch.

**Mrs Allen:** Except for the itch. The itch I can't control. **CHAIR:** You said the swelling went on for two months?

**Mrs Allen:** Yes. They go down during the day when she went out to the paddock or when she was worked they would go down to a certain point and then that night she was stabled they would just come up again one morning, but it wasn't a thing that was ever evident prior to that vaccination.

**CHAIR:** The relationship with your vet is guite good?

**Mrs Allen:** Yes. Apart from having him come to vaccinate our horses we haven't had a need for any other complaint. We do not see him unless it is vaccination time.

**CHAIR:** My concern is that if it is something so significant, potentially with a horse that you think might win the Brisbane and Sydney Ekka, that only a text was sent and you are saying there was no reaction. If you were that concerned my question to you is why didn't you follow it up or go and get a second opinion if it was that big of an issue?

Mrs Allen: The cost.

**Mr Allen:** We have been in horses all our lives. We just treated that horse then to say this is what is going to happen and she didn't have a temperature, she only had four swollen legs so therefore there was no immediate danger. As my wife said, we have made our living out of horses all our lives. We only have vets for important things. Like my wife said, we don't want to have the thing that if we get a horse with colic and we need a vet we cannot get a vet. That is the bottom line of where we stand. It is not the money to pay to have our horses vaccinated, that is not one important thing at all; the important thing is that this horse is a bit special, she had the vaccination, and in two, three days this mare's legs blew up that night and that's how they were. We've had her since she was three years old, never a problem until she had the fourth vaccination.

CHAIR: No real dramas with the first initial doses?

Mrs Allen: No.

CHAIR: And the booster dose?

Mrs Allen: No, didn't show any sign until this fourth vaccs.

Mr Allen: As other people have said, we had this mare done then because she didn't have a competition for four or five, six weeks so that we had time for the—we expected, yes, they can get a bit of swelling in the neck, all them things, we understand all them things but this mare's legs all blew up. The only thing I will say is when I did speak to the vet the main thing he was worried about was that she could get protein founder when he was treating her. So to me if that is what they put on the table first up, and may I tell you I've been a farrier for 50 years, so I deal with horses all the time, if the first thing they put on the table when you question them is be very careful because it could founder, to me that is very serious, that is the end of a performance horse's career. As my wife said, we are very like this, whether we would give her another injection. From the reading, we spent the money to get the testing done on them other two fillies and they are still miles above what they say they need to be protected. I did hear one vet who spoke earlier said about we need to know this, do they need another vaccination. If they are running at over 1,000 and they say 16 is enough for them to be protected from Hendra why would you want to give them another vaccination if they are still running at over 1,000 in their blood count, done from CSIRO, done from professional people to put it on the table. Thank you.

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**Mr PERRETT:** Thank you very much for coming along. It has been very, very informative. I take note of the fact that you are not trying to apportion blame to anyone.

Mrs Allen: No, not at all.

**Mr PERRETT:** I think that is very considerate in respect of what you are putting forward to this committee. I would be very, very interested in the clinical response to what you are suggesting here today. I think not only would I be interested, this committee, but more broadly within the veterinary profession itself and even back to Zoetis, the manufacturer, to get some clinical response back to not only your observations, but the test results that you have. I think it could be very, very helpful, to the ongoing evolution of this particular vaccine.

**Mr Allen:** If you look at it from their point of view, when this vaccine was first put out it was two shots and one in six months and then six monthly. Already they have gone back to the table and come back and said now it is 12 monthly. Maybe they need to go back to the table and come back and say maybe it is only two years or three years. I think from the horse people's side of it if they came back and said, look, we have done more study on this vaccination and now you only need to get your horse done every two or three years to booster, I think you would find a lot more response from the horse industry.

**Mr PERRETT:** That is what I was alluding to. Already in some of the submissions I think we received there has been suggestions that the fact it has gone to 12 months is providing some further evidence that it has value.

Mrs Allen: I think that proves it, doesn't it?

**Mr PERRETT:** That is why I ask, and I know I am making a bit of a statement, but in respect of the testing that you have provided today, particularly with the blood test results, I would be interested to see what clinicians or veterinarians, their determination and reading of what you put forward.

**Mr PEARCE:** Just a quick one. Have you had any other circumstances where you have been required to report an adverse reaction?

Mrs Allen: No.

**Mr Allen:** No, the ones we just had the blood tests done on, we had them done, no problems, nothing, just a little bump on the neck, nothing to worry about, and this grey mare, until she had her fourth injection. That was the only time that we had a problem. People say, you know, two or three days. This mare's legs blew up that night, boom, and she had the injection that afternoon. There was nothing different, nothing had changed in the whole establishment with her, but just her legs all blew up that night.

**Mr PEARCE:** I don't like it second hand, but are you aware of any other horse owners in your area who have reported an adverse reaction and been treated the same way as yourself?

**Mr Allen:** We have only just been there for 12 months and there's not many horses around our area that are competition horses so really I don't know.

CHAIR: Thank you.

Mrs Allen: Do you want that?

**CHAIR:** Are you happy to supply that to us? **Mr PEARCE:** I will move to have it tabled.

**CHAIR:** Carried. Our time has expired for today's hearing. I do thank the submitters for coming along and telling us their stories, it was very insightful for us. I do thank you all for turning up today. The committee would appreciate any questions on notice being provided to us by the close of business on 13 July. I now declare this hearing of the Agriculture and Environment Committee closed.

Committee adjourned at 3.54 pm

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