

Miss Jennie Lea  
[REDACTED]

Yippin Creek 2446  
[REDACTED]

15<sup>th</sup> of April 2016

Parliament House  
George Street  
BRISBANE 1LB 4000

In the following reports I have focused predominantly on:

- Infectious Diseases, where the Hendra virus ranks against other Zoonotic Diseases
- How the Hendra virus is transferred from horse to human
- The relationship of the transfer to humans, Work Health & Safety, and Personal Protection Equipment (PPE)
- I have included two case studies that are a good example of how the Australian Veterinary Professionals misled horse owners, and the corresponding reactions suffered by the horses.
- Why the Hendra virus is so dangerous, and the real risk to people, specifically that of Veterinary Professionals, and how to avoid contracting the Hendra virus.
- The advertising of the Hendra virus vaccine prior to registration, the conduct of those associated in the Zoetis Hendra Virus Information Drives, and what owners were being told.

These reports have been in keeping within my personal first-hand knowledge working in Equine Specialist Infectious Diseases Hospital, International Quarantine Foaling Hospital, overseeing mares in Quarantine in Ireland being prepped to travel to Australia. As well as many years working with many of the world's most valuable Thoroughbreds; mares, foals, racing stock, and stallions, and in the top Equine Hospitals within this industry both here in Australia, and Ireland.

Thank you for taking the time to read these reports

And for having this Enquiry

Sincerely

Jennie Lea

## Who am I

My name is Jennie Lea, I am 52 years old and have been involved with horses my entire life. However I came from a long line of chefs so was encouraged to become a chef myself; although my horses and veterinary aspects were still my greatest love. Once I rose as high as you could go as a chef, leaving no more motivation or challenge, I retired and other than my family, devoted my life to my horses.

At the age of 10 I would routinely read books like Hungerford's Diseases of Livestock, and by my 20's I'd exhausted all reference material on horses, their anatomy, diseases, and understanding the process of digestion within the biomatrix of the horse, that I could find in the local libraries where I lived with my family.

Once retired from hospitality in my 20's, I made the choice to attend college to gain greater understanding, and to gain the bits of paper I needed for people to give me credit for my knowledge, and firsthand experience.

Knowing how the system works, and not prepared to waste my time with teachers who had no credibility, I hand-picked each college to permit me to study under the highest, respected people in the equine industry. This meant attending several colleges, even if it meant only attending for just the one subject. Without exception I was the highest ranked student in the college with a grade score average of 98%, except once, where another student had 98.5% and I only had 98%.

I was putting in the ground work to build the best foundation I could to develop the career I'd always wanted. Research and Development in Equine Nutrition; with the desire to be the first woman to gain a PhD in Equine Nutrition, so with the only other woman who had attained a PhD in Nutrition, was at Richmond college/University of Western Sydney (Formally Hawksbury Ag), this was my primary choice to finish college studies there and slip directly into the university system.

To have a true understanding of how and why the biomatrix of a body works you first must know every aspect of what can affect it, and this included Contagious Diseases. With this one very vital element put into the mix, it gave me what I strived for the most; a challenge, but more so, a challenge that brought with it additional knowledge.

By this time I had attended four different colleges, and amassed a great deal of knowledge into how nutrition responds on the emerging disease within the horse, and how adding or subtracting various elements within the diet of the horse had a profound effect on it. This then spear headed me into the design and development of a new protein meal that was far more digestible, but also provided optimum response on the immune system.

It was here that my head teacher convinced me to do my work placement with Coolmore Australia Thoroughbred Stud, for the elective of Breeding. (Chosen because I needed to know every aspect of nutrient requirement, from pre-conception, through to death). Being a mature aged student I also had work commitments, and didn't want to take additional time off; but looking back now I understand the huge advantage caving in to my teacher and going to Coolmore Australia has had on my life.

I had already put six years work into my primary project when one of the earliest viruses became known, 'the worm'. My partner had permitted a work colleague to use his laptop, the hard drive was contaminated, and my six years of study was gone!

I had already turned down an offer of work from Coolmore at this time; however with the heartache I felt after losing all my work, I accepted the second offer and was placed directly into the hospital system and trained as a night watch foaling specialist. Within weeks I was posted into their Infectious Diseases Unit (capacity of approx. 360 mares, and foals) to do the foaling, which included full protocols and PPE with every horse. This was because of how many years I'd spent studying infectious diseases, and had already gained all my protocols in college. The following year I was put in charge of foaling etc. in Coolmore's International Quarantine Foaling Hospital, at the time there was only three of these hospitals in Australia, and Coolmore was the top one.

From there I was head hunted by a member of the Dubi Royal Family to go to Ireland and work for him there. I was foreman of the VIP Wet Mare Yard (mares with foals at foot) that contained 20 stables. It was the yard where wet mares owned by various members of Royal Families in Europe, and major celebrities, or mares who themselves were VIPs. I was on call 24 hours a day and worked a 7 day week. I was solely responsible for the health and wellbeing of every mare and foal in the yard. I had up to four staff and on this farm (containing seven other yards as well as my yard) I only answered to the Assistant Stud Groom, and the Stud Groom. I reported to the Stud Vet each day to touch base with treatments, or any concerns I may have with any of the horses in the yards, and worked side by side with him. We do have Infectious

Diseases in Ireland as well and it was up to me to set up all PPE and ensure all staff followed protocols to the letter. I also developed and did an initial check of all x-rays and reported directly to the Stud Vet, I was also privileged enough to assist our resident Equine Cardiologist. Later I also oversaw the Quarantine Yard with the mares that were being quarantined to be sent to Australia, predominantly to Coolmore Australia.

After returning to Australia I accepted the position of Assistant Stud Manager of a Thoroughbred Stud, in the Hunter Valley. It was here I was trampled by a panicked group of eleven Yearling Colts, and was trodden on by seven of them as they went over the top of me. This brought about my early retirement from Thoroughbred studs.

I am now a published author on Equine Nutrition, and have still assisted many people with the handling and training of young, (very valuable) Thoroughbred foals. I now have my own stud, with a young four year old Quarter Horse Stallion that I bred myself, and a band of valuable Quarter Horse mares, and Born in the Wild Brumby mares.

Because of a life time of studying equine diseases and especially infectious diseases I have had the opportunity to have an understanding of the Hendra Virus, and just how rare this particular infectious virus is. I have been fortunate enough to be able to bounce ideas off many other well educated people, and we have been able to raise our knowledge of this virus to a very high level. Between us we have been able to look at Hendra from all directions at the one time. We have spent countless hours combing through published reports to find what we had initially believed was fact, only to discover it was fiction. And the most disturbing thing of all is our belief of just how deep these fictions that have been portrayed as facts have gone.

These are my findings and understanding of not only the Hendra Virus, but its effect on the Equine World in not only Queensland, but all over Australia.

Thank you for taking the time to read this.

## ADVERSE REACTION INTERVIEW

### Case 1

Owner of 4 horses, 2 very aged and no longer competing in Equestrian events or shows, and 2 who were competing.

At the time the vet came out to see her and tell her she “Had to vaccinate the horses”. She was in a very emotional time having just moved back to her parents’ house with the breakup of her marriage. The horses at that time were still on the property she shared with her husband.

The owner told me that looking back now she could see how the vet was very careful what words she chose, and how it was evident to the vet, that she believed the vet was referring to the EI vaccine. She also stated that when the vet said all four of her horses had to be done, that she said; “Why would we vaccinate the older horses, they are never going to compete again?” that it was this point that she noticed the quizzical look on the vets face, then the realization that the owner didn’t know she was in fact there to use the Hendra Vaccination.

At this point the owner told me that she had no idea that a vaccination had been released for the Hendra Virus. And at no time did the vet advise what vaccine she was telling her that she “had to vaccinate the horses” with.

Her emotional state was such that she believed the vet and trusted her that she was doing the right thing.

Due to the fact that the horses needed to stay at the property while she moved to her mothers, the owner went on to tell me about the severe changes of character and behaviour of one of the horses, to the point that she wondered if her husband had been taking pot shots at the horse; causing the severe anxiety the horse was displaying.

During this time she discovered that the vaccine she'd agreed to be given to her horses was in fact for the Hendra Virus, but didn't put two and two together until more than a year later when she was able to move back to her home, and back to being with the horses on a daily bases.

At no time did the vet tell her she was part of a Field Trial for the Hendra Vaccine.

At no time did the vet ever give her the insert explaining what the vaccine was, and what to be aware of. And the vet told her that the vaccine was "Very Safe, and only a small lump at the injection site, or they might be a bit off colour the following day, might possibly happen."

At no time did the vet inform her that if either of the horses did show any adverse reactions, that she had to immediately contact the vet.

At no time was she told anything at all about the vaccine.

And now she realizes that by trusting her vet, the physical and emotional cost it has taken from her.

After the fifth needle she discovered the truth of what was also happening to her other horse as well. Because the reaction to the first horse was so severe and so dangerous, she didn't notice the reactions of the second horse, and all the while she was thinking she was going to lose the first horse.

By this time they were due for their fifth injection. And for the first time she was there to witness the truth about her horses.

This was an 8yr old Irish Sporting horse, always happy to be ridden, loved to work, and easily coped with training with lots still left in the tank.

The following is from a printed sheet the owner gave me:

Maestro 8 year old -

Owned since 4 months old

Had no previous illness

- 3 days after injection lethargic during training session (very unlike this horse)
- He was given a week off work
- Following week
- Swelling around throat latch area, subsided
- Put back into work but still very lethargic and insisted on stretching his neck long

- Taken out of work
- Loss of weight, increased his hay
- Odd swelling appeared on each side of his cheeks in circles around 10cm diameter
- Noticed that he'd taken to standing in the dam

Following week 9<sup>th</sup> December 2014

Found him with his head hanging to the ground covered in sweat

- High temp 40.8
- Rapid dehydration
- Pale gums
- Rapid heart rate
- Rapid loss of weight

Vet attended

- On IV fluids for three days
- High dose antibiotics – and anti-toxin
- Took 3 days before his temp returned to normal
- Returned to paddock (drinking and eating)
- Lay down on the Friday night (3 days after returning to paddock) with sore feet
- Laminitis in all four feet (this is when she told me she called the vet out and asked to euthanize the horse. Instead the vet belted the horse until it stood, said “So NOW What do you want ME to DO!” and left)
- Applied ice for next 48 hours
- Tuesday 17<sup>th</sup> severe protein loss, blood from nose,
- Still managed to eat 3 bags of carrots just before we said goodbye. Euthanized 17<sup>th</sup> December 2014

Prior to vaccination he was an extremely healthy horse.

\*\*\* up until this point we spoke from time to time about what was happening at the physical level, and why he did many of the things listed above.

It was only then that she turned to her stapled together vet bills, and she started to look at them. It was the 1<sup>st</sup> time she'd gone through them because of the toll her emotions had taken from her, to the point that she just couldn't face looking at the collection of vet bills.

It was her partner after everything had happened, that ensured all bills were finalized because of the emotional toll she was being forced to endure while sitting with her dying horse for three and a half days because the vet refused to euthanize him when asked.

So it was only now that she noticed the discrepancies in the bills. That only the date of the final vaccination was correct. And that the only treatments



mentioned on the bills was for IV fluids, antibiotics and bute. There was no mention of the various blood tests that had been done, and when she asked the vet about the results, she was told the results weren't back yet. And she never has been told the results of the final bloods pulled on that final day.

We joked about him eating the carrots.... with me commenting that "carrots to an Irish Sporting horse, is like drink is to an Irishman."

This was just after she told me that while waiting for the vet to come out, how he was bleeding from the nose, and had clear yellowish fluid trickling from him like sweat. I knew what this meant and what that poor horse was forced to go through because a vet decided to use her horses to test this (at the time) experimental drug on him, and then refused to euthanize him so the test results she was gathering could be stretched out as long as possible.

The owner asked why the vet would insist on pulling bloods and taking them immediately to the clinic if she was there to euthanize the horse.

My response was..... "So if she's asked, she can honestly say she came out to take bloods, and when she left the horse was still alive...."

There has never been any record of this horse being euthanized. Neither the vet nor Zoetis notified the APVMA of the reaction of either of these two horses. She was forced to do this herself, the whole time thinking that Maestro had been listed as being euthanized. She now knows that isn't the case, and he is still listed as being alive.

Since refusing to continue the vaccinations after the fifth one, her first horse is slowly returning to normal and she hopes that one day she can again safely be able to ride him.

It wasn't until much later that she discovered that the vaccine hadn't been registered, that her horses had been used as test subjects. The vet has never told her the truth or has shown her any remorse for what she has done.

If there has ever been a time where a vet has used the opportunity of making good use of an owner's emotional state to the vets' best interests, then this has been the case here. I've now sat with the owner a few times while she's shared her story, and had the chance to ask questions. I have no doubt in my mind that if she hadn't been in the emotional and physical situation that she was, this outcome would not have happened. She would not have allowed the vaccinations to continue if she had been there with her horses each day. She would have picked up that it was the vaccine, not someone deliberately trying to harm her horse, and the second horse's symptoms would have been noticed much earlier. And that he would still be alive today.

## **Case 2**

The owner of two horses, both in competition; and the owner is told that she will no longer be able to compete unless the horses are vaccinated against the Hendra Virus, due to the new mandatory vaccination policy.

- At no time was the owner told that the vaccine wasn't registered, or that it was only under a restricted licence, and that by permitting her horses to be vaccinated she was agreeing to be part of field trials with this experimental vaccine.
- At no time was the owner given any written material on the vaccine.
- At no time was the owner informed by the vet that there may be a chance that her horses may have a reaction to this experimental vaccine, and if anything happened that she was to notify the vet within 48 hours.
- When the owner asked the vet about the vaccine, the vet told her that "It's perfectly safe to use," and shortly after "they might get a small lump at the injection site, and might be a bit off colour for a day." This is the sum total of the information on the vaccination that the vet told the owner.
- The vet had a multi-vile box in the back of her car that was not refrigerated or in an esky. And at no time with any of the vaccinations that followed did the vet give the owner any written information on the vaccine.
- The vet did not do any health checks at all, just walked up to the horse and injected the vaccine.
- The vet did not ask for any previous history of illness, or if the horses had ever previously reacted to any other vaccine given to the horse.
- The vet at no time gave the owner a form to sign stating she was aware this was a field trial she was taking part in.
- The vet DID tell the owner that with the first two injections had to be exactly three weeks apart and HAD to be at the Exact Same Time of the day!

\*\*\*\* This was early 2013\*\*\*\*

This is the case study of the Gelding named Bart.

Initial injection no reaction.

Second injection small lump at injection site, and off colour for 24hrs.

First booster six months later:

- Muscle sore
- 39 deg C temp that lasted for two to three days, given bute to help bring it down
- Two days wouldn't eat

\*\*\* At no time did the vet ask how the horse had been and if he has suffered any reactions to the vaccine. And the vet informed the owner that the horse could now go on to twelve month boosters instead of six.

Second booster six months later; the vet told the owner that there had been a slight hiccup, and the paperwork Zoetis needed to file with the APVMA was one day late, so they had to continue with the six month boosters for the time being.

- 40 deg C temp that lasted two days.
- Didn't eat for four days, started to pick at hay at the end of the fifth day.
- At 5 pm temp 40.5deg C, he was a lather of sweat and panting hard with wide nostrils, given 20ml bute paste, and hosed for half to three quarter of an hour.
- At 6:30 am 40 deg C temp, given 10ml of bute paste
- At 5:30 pm 39 deg C temp, given 10ml of bute paste
- At 6:30 am 38.4 deg C temp, given 10ml of bute paste
- At 5:30 pm 37.4 deg C temp, given 10ml of bute paste
- At 6:30 am 37 deg C temp.

A month later the owner ran into the vet at a Dressage Competition, and told the vet about his reaction; the vets reaction was flippant "Are you sure it was the needle!" and walked off. (This was in March 2014)

Third booster (fifth injection) six months later at the end of September 2014 the owner told the vet; "God I hope he doesn't get as sick with this needle like he did the last one." The vet just brushed it off! This was 8am.

- 5:30pm he is slightly off colour for 24 hours, with a snotty nose
- Two weeks later he developed a really snotty nose, and when he was ridden down at the arena he couldn't continue, and was lethargic, he was given more time off work; but he didn't recover, so the owner decided that she was not prepared to continue to vaccinate either of the horses.

Later the owner spoke to a friend who worked in medical labs and told her the story. Her friend asked what tests had the vet done, and the owner told her only bloods. The owners friend gave her two swabs each for both viral and bacterial test, with careful instructions on how to take the swab, hence being give two each in case the owner got the first one wrong.

The owner took the swabs, and took them directly to the vet to be sent off for testing.

The vet only sent off the viral swab, NOT the bacterial swab!

The vet said the swabs showed nothing, and came out took more bloods. She was meant to send these bloods off for a full work up; however the vet only requested basic blood counts, and withheld the report.

The vet then told her, pointing to the calcium result that showed only a very slight rise that this meant that the horse had cancer and was going to die!

Although the owner couldn't read and understand a full report, she could however understand that this result was for calcium levels and nothing more which she pointed out to the vet who promptly became angry and stormed off.

The owner changed vets.

The new vet rang Zoetis and the owner received a phone call from Richard L' Strange from Zoetis as to why she wouldn't continue. When the owner told him about how sick he'd become, and how bad the reaction was to the forth needle, and how he'd been given the injection in the morning, and by 5:30pm when she got home from work and he had a temp of more than 40 deg C, Mr L' Strange responded with..." so the next day he had a temperature." The owner corrected him, telling him no, it was that same afternoon. And again Mr L' Strange tried to have her agree that the temperature didn't eventuate until the second day and again the owner corrected him. After he did this same thing for the third or fourth time the owner asked him to Stop trying to get her to agree that the high temperature was the next day when she had now told him several time that No it was that afternoon when she came home from work! Mr L' Strange said he would ring the vet and look into it.

In a further phone conversation Mr L' Strange suggested that the horse be scoped, and samples sent off for testing. The owner told Mr L' Strange that this was a test she couldn't afford on top of what it cost to have the scope done. Mr L' Strange offered to pay for all the tests if the owner agreed to pay the cost of the endoscope. The owner agreed.

The owner wasn't given a full explanation of the test results, and only discovered what they meant later after speaking to someone about a vet in Sydney that was gathering information on horses that had reactions to the vaccination. The vet agreed to look at the reports. He later rang the owner back and asked if the horse was still alive! And then how far down did the endoscope go. The owner told him the vet could only just get past the back of the horses throat but couldn't go any further due to the amount of congestion!

This vet took the time to explain to the owner that his immune system had gone into complete failure, to the point that it could no longer tell if the horse was sick. That the results were so bad the horse should by all accounts be dead! He also told the owner that the horse had pneumonia.

There was only one vet in town who had the equipment needed to do an endoscopic examination for a horse, and except for this vet, the vet in Sydney was the only one who had been honest with her.

Although I'm not a vet, I do have a basic understanding of lab reports and how they are written, but it was easy to see that the only bloods that had been sent off were that of viral bloods, at no time were bacterial bloods sent off. Also the vet had been specifically requested for EHV4 tests to be done with the exception for basic blood count.

Neither of the vets the owner went to did any testing to see if it was the vaccine that was making the horse sick. In fact it was just the opposite! They were actively attempting to find anything else it could be, other than the vaccine.

But worst of all, neither of the vets that the owner had had come out to treat her horse, nor Mr L' Strange, contacted the APVMA. Neither did any of them even tell her she could report it. She said looking back you could see that the vets were clearly skirting around the fact that at no time was this vaccine registered, that her horses were part of a field trial, and continued to deceive her the entire time. It was another owner who had horses who had a severe reaction to the vaccine that told her that she had had to contact the APVMA herself because her vet and Mr L' Strange failed to report the reactions of both her horses, and has only now discovered that the fact that one of her horses that had to be euthanized because of the reaction, has also never been reported to the APVMA.

The owner contacted the APVMA and went through the process of reporting the reaction to the vaccine, she was asked many questions, and when she told me the questions she was being asked, it was apparent that yes they were collecting data, but not the type of data required for a report of a reaction. It was more like data you would be collecting for a field study; it just didn't seem right. As soon as the APVMA collected all the data they requested, all contact with the owner ceased! This was around the time the vaccine was approved for registration, but when the owner rang back to find out about getting a report that showed her horses reaction had been accepted, she was told that that all finished the moment the vaccine was registered, and promptly gave her the brush off! The person she had been speaking to right up to a few days prior no longer took her calls, and only by speaking to others did she discover that her horses' reaction to the vaccine was never registered! Not even by the person she spoke to at the APVMA.

Later when the owner asked me to come out and have a look at her horse, and we sat and chatted after, we went through what had happened, that the vets, Richard L' Strange from Zoetis, and the APVMA had deceived her. And that what the vet in Sydney stated was correct in that the horse had suffered a complete breakdown of his immune system. While we chatted I made mention that people with horses who had had EI were not eligible to be given the vaccine, and yet even those same vets who told the owners they couldn't vaccinate the horses, also refused to attend the same horse because it hadn't been vaccinated!

This was when I discovered that this horse had had EI! I went cold when she told me. My next question to the owner was...."Did Bart present the same as he is now when he had EI?".... you could see the penny drop in the owners mind; she looked up and simply said .....yes.....

Although he wasn't contagious, every time Bart gets even the slightest bit stressed he has been having this reaction over and over again.

Sitting across from her, I had to look her in the face and tell her there is nothing we can do for her horse except try and keep his temperature in check, and pain level down with the use of bute. That this on its own will eventually cause liver and Kidney failure; that she will need to consider what was going to be best for Bart, sooner rather than later.

After I left the owner rang a few specialists who gave her the exact same answer.

Of the two vets and Richard L' Strange, she has been told that what has caused Bart to be so sick:

Was because he had a very heavy parasitic worm burden when she had been charged a lot of money for a faecal egg count that showed a low burden only a week prior to being due to be drenched.

That her horse was dying from cancer because the calcium reading was only just over optimum levels. (Well yes, he is dying, but not from cancer).

That he had EHV4, when all tests returned a negative result..... And why was he being tested for EHV4 in the first place?

Why didn't they send off any of the bacterial bloods, or the bacterial swabs?

But most of all why wouldn't they register this reaction to the APVMA which by law they had to do?

This owner like so many others has been lied to, conned, treated as a fool, and expected her to turn around and thank the dishonest vets, and the Head Man for Zoetis Australia along with the APVMA.

# ZOONOSES

Zoonoses are those infections that are naturally transmitted between vertebrate animals and humans. Worldwide, an estimated 60-70% of emerging infectious diseases in humans are zoonoses and a large proportion originates from wildlife.

If you were to go to Hungerfords Diseases of Livestock ninth edition, you will find 61 pages that contain information on zoonotic diseases, this fall between pages 1292 and 1353. They include Cattle, Sheep, Pigs, Horses, Goats, Dogs, and Cats. And predominantly focus on diseases found in Australia.

Or Animal Health in Australia volume 1, Viral Diseases in Horses.

Or Animal Health in Australia volume 10, Ectoparasitic Diseases.

These are just three of many reference books that veterinary professionals have access to. There is in fact close to 100 books that make reference to, and description and treatment of zoonotic diseases here in Australia.

So there really is no excuse for veterinary professionals in Australia to be complacent with regard to zoonotic diseases; or in the way they have chosen to keep themselves safe while treating animals with zoonotic diseases.

In this report I will be focusing on some of the most common zoonotic diseases in Australia, the ease or difficulty of contracting these diseases, how innocuous or how deadly these diseases are, and the importance of following the required Protocols while handling or treating an animal with a zoonotic disease and the importance of Personal Protection Equipment (PPE), this is in order to draw a parallel to that of the Hendra Virus.

Thank you for taking the time to read this report

Just a few of the Zoonotic diseases found in Australia today

- Angiostronglosis (Rat Lung Worm)
- Anthrax
- Australian bat lyssavirus
- Avian influenza (bird flu)
- Beef measles
- Bovine spongiform encephalopathy (BSE or Mad Cow Disease)
- Brucellosis (*Brucella suis*) in dogs
- Brucellosis in pigs
- Cryptococcus
- Dengue
- Giardiasis
- Heartworm (*Dirofilariasis immitis* – Human Pulmonary *Dirofilariasis*)
- Hendra virus
- Hydatids
- Leishmaniosis – in dogs
- Leptospirosis
- Listeriosis
- Liver fluke
- Lyssavirus
- Murry Valley Encephalitis
- Parma Forrest Virus
- Psittacosis
- Q Fever
- Ross River Fever
- Salmonella
- Swine influenza
- Tetanus
- Toxoplasmosis

If we were to look at just one of Australia's most deadly diseases and compare this to the zoonotic diseases that a vet may come in contact on any given day, and ask the question; "Why don't we see doctors refusing to treat people with this incurable disease?"



The simple answer is; by the uses of PPE, and following infectious diseases Protocols to the letter.

## **HIV & AIDS**

As at 31<sup>st</sup> of December 2010, **30,486** cases of HIV infection had been diagnosed in Australia, and an estimated **21,391** people were living with a diagnosed HIV infection. The number of HIV diagnoses in Australia in 2010 was **1,043**

The following is the number of NEW cases diagnosed in Australia each year.

2006 - **1,039** 2007 - **1,051** 2008 - **1,012** 2009 - **1,062** 2010 - **1,043**

Please keep in mind that these figures are taken over a two year period showing only the Confirmed Human Cases.

<b>DISEASE</b>	<b>2009</b>	<b>2010</b>
Leprosy	4	11
Cholera	5	3
Arbovirus	8	24
Dengue	1406	1201
Anthrax	-	1
Brucellosis	32	21
Leptospirosis	146	131
Q Fever	310	323
Hendra	1	-

If we were to take into account the total number of humans that have been infected with the above zoonotic diseases between the years of, 1994 and 2016, the gap between these diseases and Hendra Virus cases becomes a gaping chasm.

Even Anthrax far outnumbers Hendra. In fact there isn't a single zoonotic disease in Australia that has less Confirmed Human Cases, than that of the Hendra Virus.

Thus making the Hendra Virus by far rarer than that of Anthrax & Leprosy in Australia.

With some of these zoonotic diseases it's especially hard for a General Practitioner (GP) to diagnose due to the non-specific symptoms such as fever; and yet all can lead to serious complications, and some including death.

Overall 76% of reported Brucellosis cases and 64% of Leptospirosis cases in 2010 were in Qld, while Qld and NSW had 46% and 41% of Q Fever cases, respectively.

Patients with these diseases were predominantly male and aged 15-59yrs old; however, an increasing number of women with Q Fever were reported between 2001 and 2010.

Zoonoses are more common in Rural and remote areas such as NW NSW and Western Qld.

Again keeping within the figures found only in NSW and Qld in 2015

	NSW	Qld
Australian bat lyssavirus	-	1
Brucellosis	3	11
Leptospirosis	12	67
Q Fever	167	243
Leprosy	2	1
Tuberculosis	440	156

But if we were to look at the total number of notifiable diseases reported in Australia, and only for the year 2015; the numbers are staggering.

Queensland – 55,005 reports

NSW – 50,540 reports

While looking up the figures for 2015 something stood out above all else, and that was with reference to the actual diseases that are ‘Notifiable Diseases’, which included diseases such as the above already discussed diseases; but included diseases such as The Plague, and Rabies.

And yet I couldn’t find the Hendra Virus listed anywhere in any of the data found on this Government site!

**The only conclusion I can draw from this discovery, is that the Hendra Virus is So Rare that people have a far greater chance of becoming infected with either The Plague, or Rabies, here in Australia.**

## **ANTHRAX**

It’s extremely important when animal deaths are being investigated in the anthrax belt, because odd cases occur at random, and without notice in livestock, its always life threatening, with veterinarians falling into the most high risk group of humans contracting this zoonotic disease.

Anthrax is an acute infectious disease that is highly unpredictable. It can recur more than 50 years after its apparent disappearance in an area, due to its ability to remain viable in the soil, even in the most extreme climactic conditions; so it is essential that all stock owners and veterinarians remain aware of the disease.

Mode of infection:

- Accidental wounding
- Handling dead carcasses
- Dead wool
- Hides
- Biting insects

Animals that can transfer Anthrax:

- Cattle
- Sheep
- Goats
- Pigs
- Horses
- Wild pigs
- Dogs
- Cats

## **BRUCELLOSIS**

Even though the following material comes from the WHO, and CDC, I wish to show the very real threat to people in Australia, specifically that of Veterinary Professionals, who are at risk of contracting this zoonotic disease.

I wish to bring to this report the level of threat this one zoonotic disease is concerned throughout the world. This is anything but a zoonotic disease found only in Australia; **thousands** of people around the world die from this disease every single year!

**The following excerpt on Brucellosis, has been taken directly from World Health Organization (WHO)**

Brucellosis is a disease of mainly cattle, swine, goats, sheep and dogs. The infection is transmitted to humans by animals through direct contact with infected materials like afterbirth or indirectly by ingestion of animal products and by inhalation of airborne agents. Consumption of raw milk and cheese made from raw milk (fresh cheese) is the major source of infection in man. Most of the fresh cheeses are sheep and goat cheese. Next to this it is considered to be an occupational disease for people who work in the livestock sector. Human-to-human transmission is very rare.

The most rational approach for prevention of human brucellosis is the control and elimination of the infection in animals. Pasteurization of milk is another protective mechanism. Vaccination of cattle is recommended for control of bovine brucellosis in enzootic areas with high prevalence rates. The same holds true for goat and sheep brucellosis. Eradication by testing and culling is the way to the elimination of brucellosis in regions with a low prevalence.

**The following is an excerpt taken from the Centre's for Disease and Prevention (CDC)**

**(Last update 2013)**

### **Humans and *Brucella* Species**

Exposure to most species of *Brucella*, such as those associated with certain types of animals, could potentially lead to infection.

When infections in humans occur, the following *Brucella* species are more often responsible.

#### ***Brucella melitensis* \*\*\*\***

- Principal hosts – goats and sheep
- Most pathogenic on humans
- Considered to be eradicated in the U.S. since the early 1970s
- Sporadic cases in humans in the U.S. occur related to consumption of unpasteurized dairy products from countries where the disease is present

#### ***Brucella suis* \*\*\*\***

- Principal host – swine
- Since *B. suis* is normally found in pigs, wild hogs (feral swine) hunters are at risk of becoming infected when they field dress infected pigs.

#### ***Brucella abortus* \*\*\*\***

- Principal host – cattle
- Eradicating of *B. abortus* from cattle is nearly complete in the U.S. but the disease still occurs in some wild bison and elk herds in the Western U.S.

\*\*\*\* Three types of bacteria that cause brucellosis – are designed as select agents. This means that they have the potential to be developed as bioterrorism agents due to their ability to undergo aerosolization.

#### ***Brucella canis***

- Principal host – dog
- Individuals who are in close contact with dogs, or breeders\vetterinary staff who assist with birthing are at risk of becoming infected.
- CDC does not currently perform serological testing for *Brucella canis*

### ***Brucella ovis* & *neotomae***

- Not known to be pathogenic for humans

### ***Brucella ceti* & *pinnipediae***

- Recently discovered in marine mammal species
- Few human cases diagnosed with neurobrucellosis

(Last update 2012)

Host animals for *Brucella* species

*B. abortus* – cattle

*B. canis* – dogs, is a bacterium that causes brucellosis in dogs. It can also cause infection in humans. Typically, there is a low risk of infection for pet owners.

Dog breeders and **Veterinary staff**, however, face an increased risk since they may be exposed to blood tissues, and fluids associated with the birthing process.

Currently, **there are no serological tests to detect antibodies to *Brucella canis***. Therefore, more attention should be given to symptom monitoring.

## **LEPTOSPIROSIS**

Leptospirosis is caused by a complex group of closely related bacteria of the genus *Leptospira*. There are several strains that occur in different locations, and tend to affect certain species of animals more than others. Some of the most at risk animals that veterinary professionals may come in contact with are dogs, a variety of farm animals, and native animals, although the cat is rarely reported to become infected with this disease.

Like Brucellosis, Leptospirosis is also an international disease, and each country has its own primary source; but here in Australia we mostly see infection occurring where cattle and native animals such as kangaroos, wallabies, and other common wildlife that frequently people farms and small acreage. Another primary source of this zoonotic disease is rodents.

Veterinary professionals who handle native wildlife in association with organization such as WIRES, pet rodents, and dogs are at risk of contracting this zoonotic disease as large animal vets are.

The primary conditions that Leptospirosis caused by the bacteria *Leptospira*, is warm, humid areas, placing people in states like Queensland, The Northern Territory, and Northern Western Australia, and Northern New South Wales most at risk.

The bacterial spores are most commonly found in and around stagnant water, thus affecting any animal or human that swim in, or drink the water.

Once in the body *Leptospira* can be found accumulating in the kidneys, and are shed via the evacuation of urine.

Because of the very nature of hunting with dogs, the association with wildlife, and a dogs love of water holes and deep puddles, hunters, and veterinary professionals who treat hunting dogs are in the highest 'At Risk Group', specifically young adult males, who take far more risks than older hunters and veterinary professionals do.

Rodents in areas considered to be most at risk of Leptospirosis are also a prime cause of this zoonotic disease. A good example is a lady working on a horse stud in Kempsey NSW contracted Leptospirosis from rat and mouse faeces and urine inside one of the storage areas in the stables, this occurred in 2002, and she is still suffering from the infection today, and is still not able to return to work.

Rodent's habit of urinating and defecating while walking, leaving urine trails everywhere they go; thus placing humans who work in feed sheds and mills at high risk of contracting Leptospirosis.

This is also a high risk situation for other animals to also come into contact with contaminated rodent urine and faeces, and again placing veterinary professionals at risk of contracting this disease.

The most common event that is a precursor to widespread infection is during the humid summer months, early autumn, and following floods.

*Leptospira* bacteria are predominantly shed in the urine of infected animals, however they can also be found in tissue and fluids within the body. And like the Hendra virus, is especially contagious when the infected body fluids come in contact with mucus membranes. They can also be transferred via bite wounds, and ingestion of infected animals.

The most frightening aspect of this zoonotic disease is the ease that it spreads from one host to another. Like Q Fever, Leptospirosis is also infectious via aerosol contamination. In other words you don't have to come in direct contact with an infected animal; the spores can travel through the air. But more frightening still is the fact that given the right climactic condition, the level of spores being released into the air, and the direction of the wind, you don't even need to be in line of sight to become infected.

Even after treatment is considered successful, and the person or animal is no longer considered infectious, or having completely recovered from Leptospirosis, the bacterial spores can 'hide out' in tissue, thus not showing up in blood tests, very similar to the Ross River Fever, and other similar diseases, causing a lifelong dilemma for the patient, with spontaneous symptoms at any time the persons immune system is placed under pressure.

In people who suffer from immune deficient disorders, contraction of Leptospirosis can go on to develop into Chronic Fatigue Disorder, and Fibromyalgia, and some death.

## **Q FEVER**

Is caused by *Coxiella burnetii* and can present in humans in a variety of ways, producing vague symptoms that can make initial diagnosis very difficult. These include:

- High fever and chills
- Severe sweats
- Severe headaches, often behind the eyes
- Muscle and joint pain
- Extreme fatigue
- Death

People in the high risk group for contracting Q Fever, are predominantly abattoir workers, farmers with cattle, sheep and goats, and veterinary professionals.

Although cattle, sheep and goats are listed as the primary source for Q Fever, it is in fact found in a very wide range of animals; these include:

- Dogs



- Cats
- Rodents
- Marsupials
- Birds
- Arthropods

This is a very hardy zoonotic disease that can remain in the environment, even in some extreme conditions, for a long length of time. It's important to remember this once an outbreak has been discovered, the necessary treatment of the area is important to prevent subsequent outbreaks.

It is shed via urine, faeces, raw milk and particularly via birthing fluids. However it's not required to come into contact with contaminated materials, or body fluids to become infected with Q Fever, it is also infectious through the inhalation of aerosol contaminants of *C. burnetii*. It is via this route that most non-occupational infections occur.

There have been many incidents where people have become infected while standing at the rails at agricultural shows that provide nurseries where lambs and kids can be observed being born.

Although many people are asymptomatic, or suffer self-limiting fever, and most diagnosed respond well to antibiotics, there are those who go on to suffer serious and at times fatal additional damage to major organs or systems in the body; and those people most at risk are pregnant women, and people with immunocompromised disorders or with undiagnosed valvular diseases; these include:

- Pneumonitis
- Hepatitis
- Myocarditis
- Chronic Endocarditis
- Post Q Fever Fatigue Syndrome
- Death

Morbidity can be severe, particularly if the infections are not diagnosed and treated promptly. Acute Q Fever progresses to chronic infection in 1-5% of patients. Endocarditis is the most serious consequence. Without treatment Q Fever endocarditis is fatal in most cases, and even with treatment the mortality rate is about 10%

**Human transmission from:**

- Tick bite
- Airborne infection
- Milk
- Abattoir contact

### **Animals transmitting infection**

- Cattle
- Sheep
- Goats
- Bandicoots
- Other bush animals and birds

Q Fever Vaccine for humans was developed in Australia in 1989

And is the only human vaccine for Q Fever in the world.

In early 1990s, 90-95% of vaccine produced was purchased by abattoirs.

Between 29<sup>th</sup> of December 2015 and the 11<sup>th</sup> of March 2016 there has been 119 reported incidence of Q Fever; with the highest recorded year on record being 2002 with 792 reported cases.

**Why didn't Australian VETS attempt to protect themselves**

**The same way abattoir owners and workers did?**

**It's this same attitude that has been the cause of every confirmed**

**Human case of the Hendra Virus!**

### **Why is PPE so important when working with infectious diseases, and potential infectious diseases?**

This is because PPE is a person's 1<sup>st</sup> line of self defence against pathogens that result in infection or contagion of diseases. It provides a physical barrier that prevents contact with the person wearing the PPE and the procedure being carried out.

When correct PPE and Protocols are observed, the risk to the person can often be reduced to 0.

When people tell me that PPE isn't as important as vaccination or that PPE doesn't protect you from viruses, infections, or diseases, I like to point out that people working at the highest levels in the control of such pathogens as Ebola, list such things as PPE, as being the primary prevention of becoming infected with this most deadly disease.

The 2<sup>nd</sup> most important thing that keeps you safe is the strict observation of infectious diseases Protocols. This ensures that you act, respond, move, and perform in a very specific way. Everything you do within an infectious diseases unit, quarantine, or Red Zone, will protect you from such things as needle stick injury, contact with hazardous materials and chemicals, specifically those that can render a person (most specifically woman) from suffering damage to their reproductive systems. Many seemingly innocuous treatments over time have been proven to not only damage specific major organs, or systems, they are also in the high risk of cancer category. So by the careful observation of correct Protocols you are protected from a much wider range of possible pathogens.

But PPE and Protocols are not just there to protect the person undertaking the procedure; there are far more reasons for the use of PPE and correct Protocols

to prevent the spread of hundreds of contagions that are not zoonotic. Thus you are not just keeping yourself safe, but preventing the spread of disease to unaffected animals.

Far more animals are infected with a plethora of disease simply because veterinary professionals choose not to use PPE and strict observation of Protocols. The outbreak at the Redlands Clinic is a very good example of this.

PPE used by Biosecurity Queensland officers when **investigating potential HeV** situations to collect samples to test for HeV.

- Impervious rubber boots
- Splash-proof overalls (long sleeves and hood)
- Disposable impermeable gloves (nitrite gloves recommended) double gloved
- Face shield or safety eye ware (to protect against facial splashing)
- A particulate respirator (P2 disposable face-piece respirator, or a P2 filter in a half face-piece respirator).

**For use in cleaning, Category A Disinfectants required:**

- Soaps and detergents
- Vircon
- Iodophors/Iodine
- Biguanidines (e.g. Chlorhexidine)
- Quaternary ammonium compounds

## **KEEPING US ALL SAFE**

Right now there is a group of people working hard to map the movement of the Hendra virus from point of infection, through to death, in an attempt to be able to find the earliest symptoms of this virus, and by the assistance of early detection tests; so we can pin point a potentially infected horse, and have a guaranteed result, prior to the horse becoming infectious; thus keeping owners, handlers, trainers, veterinary professionals, and friends safe from infection.

There is also the development of specific Protocols for the safe collecting of daily health data, record keeping, how to recognize possible red flags, and what to do if more than one box is ticked.

These Protocols will include how to establish a safe quarantine Red Zone, the parameters that must be observed regarding distance of sneeze droplet area and allowance of wind push of droplet distance.

The establishment of Clean/Unclean change post, what needs to be set up, and the necessary equipment required.

Maintaining signing in and out log books and appropriate WH&S signs, specifically those that can bring a person into contact with any hazardous material, chemicals, or tools, and equipment.

There is also an information tour currently planned once the findings of this investigation have been handed down, to educate horse owners on the legal requirements regarding horses, the Hendra virus, and safety, but also to educate horse owners in how to implement the Protocols, and importance of early detections of the Hendra virus.

# **THE HUMAN FACE OF THE HENDRA VIRUS**

## **AND THE IMPORTANCE OF PPE**

### **IN THE WORKPLACE**

Personal Protective Equipment or PPE, plays a vital role when dealing with infectious diseases, it's your first line of defence, and places a physical barrier between you and the pathogen.

In areas such as dealing with animals, PPE is far more important than when you deal with most human patients. This is because with most humans you can explain a procedure to them, and ask them to do any number of things to aid the outcome of that procedure. But this is not possible with animals.

Over hundreds of years Animal Health Workers have established many important protocols when dealing with the treatment of animals, and are equally important today.

In this document I will be focusing on the 5 Confirmed Human Cases of the Hendra Virus that directly involve a vet, a vet nurse, or someone assisting a vet. Primarily because we are dealing with the claims vets are using, that it's far too dangerous for them to attend any horse that hasn't been vaccinated against the Hendra Virus. That only vaccination, not PPE, or correct Protocols, ensure their safety and protection from the Hendra Virus.

One vet said to me that the reason why PPE and Protocols don't protect them is in the event of a needle stick injury.

Correct Protocols cover the safe use of and disposal of needles. But luckily (or unluckily) there has been a needle stick injury of a member of the DPI Hendra Taskforce, when euthanizing a Hendra Positive horse. Tests later revealed this person was ok and thankfully didn't contract Hendra from the needle.

If this had have been associated with an AIDS, or HIV, or Hepatitis patient, this outcome could have been very different indeed.

The perfect example of someone not protecting themselves is when [REDACTED] chose not to follow Protocols, and not to wear any PPE at

all, when she administered the Nasal Lavage to the Hendra Positive horse in the [REDACTED]

As we are all now aware that this horse was in fact positive for the Hendra Virus, it was extremely sick, and died the following day.

When you are performing a Nasal Lavage you are instructed in college to Never Ever Stand Directly In Front of the animal! Simply because they don't understand the procedure, and will instinctively either sneeze, or attempt to Blow It Out of the nostril!

The result was the horse instantly evacuating the liquid from the Nasal Lavage, and infected respiratory fluids directly onto her face, and onto the openly exposed Mucus Membranes of the eyes, nose and mouth!

What is the correct PPE for this procedure?

- A clear full face shield
- Gloves
- clothing is to be worn that covers all exposed skin:
  - Overalls
  - Biohaz suit
  - Long sleeve shirt and closed collar
- Rubber boots with non-slip soles, these can also be steel capped

So is the Horse Owner Guilty for [REDACTED] becoming infected with the Hendra Virus? No

Is the Very Sick Horse Guilty for [REDACTED] becoming infected with the Hendra Virus? No

Is the Person Holding the very sick horse Guilty for [REDACTED] becoming infected with the Hendra Virus? No

Is the Veterinary Clinic Guilty for [REDACTED] becoming infected with the Hendra Virus? Yes - because it didn't enforce correct protocols were followed and PPE worn.

Is [REDACTED] Herself Guilty for becoming infected with the Hendra Virus? Absolutely YES - Because she **Chose** not to follow Protocols, or wear PPE!

If we are to look closer at [REDACTED] we will see that not only did she choose Not to follow protocols in this incident, but in others also.

A horse that had originally come to the [REDACTED] to be treated for an unrelated injury, soon became sick, and required a urine sample to determine what was making the horse sick.

When the horse started to urinate [REDACTED] didn't instantly notice anything to collect the sample.

So [REDACTED] cupped [REDACTED] naked, un-gloved hands, and collected the urine IN HER HANDS.

The owner who was holding the horse was horrified when she sore this, and the incident was later raised in court, because this was one the horse who came to the [REDACTED] for unrelated treatment, only to be infected with the Hendra Virus due to the Clinics Very Poor Hygiene, and Failure to clean equipment in between one horse to the next.

So the Horse that [REDACTED] was collecting the urine from, was Also Positive for the Hendra Virus..... So at which time did [REDACTED] Actually Contract the Hendra Virus? The one that sneezed in her face or the one whose contaminated urine [REDACTED] collected in [REDACTED] unprotected, Un-Gloved Hands?

There is a third Horse that [REDACTED] has also been believed to have contracted the Hendra Virus, (this was prior to [REDACTED] reporting an infectious virus in his Clinic to the DPI) and the second horse that she has been observed collecting the urine sample In [REDACTED] Ungloved Hands; again it was the owner who witnessed this, and also noted that the urine was very dark, which indicates blood in the urine, and an Extreme Risk of Infection!

[REDACTED] now travels around with the Zoetis Road Show, as a paid speaker, telling people of [REDACTED] story and how "If that horse had only been vaccinated against Hendra Virus she would not have become sick and now forced to live with the continued hardship and disabilities [REDACTED] now still suffers"..... (So which horse is she talking about? And how do we know if she was equally as foolish while working with other Hendra Virus positive horses?).

**The truth here is that IF [REDACTED] had chosen to wear the correct PPE for the procedure, as well as following the protocols that have been set out and proven to work, [REDACTED] would not have contracted the Hendra Virus, and become sick in the first place.**



Ask yourself this, if [REDACTED] hadn't contracted the Hendra Virus, how long do you think it would have been before [REDACTED] became infected with any one of the many Zoonotic Diseases that come through the door on any given day?

The most Dangerous procedure a Vet or Vet Nurse may be required to do, isn't handling an aggressive dog, frightened cat with razor sharp teeth and claws, or a crazed horse or large farm animal.

It's performing, or assisting a Cause of Death Necropsy.

Simply because you Don't Know what killed it!

Topping the list of Cause of Death Necropsy is when there is an unknown illness involved. You don't know what disease it was, or if it's species specific, if it can be caused by a multi host organism, or far more dangerous a Zoonotic Disease!

No amount of vaccinations is going to help you here. There are only 2 things that can protect you with this situation. They are PPE, and following Protocols.

PPE is your physical barrier, and Protocols ensure you follow a safe set of procedures for the task before you.

So what is the correct PPE for doing a Cause of Death Necropsy?

Simple, A level 4 Pathogen that include possible aerosols!

- Clear full face shield
- An aerosol respirator
- Double gloves (1<sup>st</sup> one under the cuff, 2<sup>nd</sup> over the cuff and taped off
- Full Biohaz suit with hood up and closed around the face
- Rubber boots with non-slip soles, and Biohaz suit over the top of the rubber boots
- A full liquid impermeable apron.

Even in the most basic of necropsies' are far more dangerous than any other procedure that isn't a necropsy. This is because the moment the heart stops beating billions upon billions upon billions of bacteria kick start the process of petrification (Decomposition). These bacteria are the most dangerous for causing infection, and a multitude of other diseases.

So the only item of PPE that's listed above that you would change is the aerosol respirator, which can be downgraded.

Even collecting samples from a dead animal the correct PPE and Protocols are what will keep you safe and protected.

As the then young female vet (in her 20s) in Cairns discovered.

Although of the 7 Confirmed Human Cases, she was the ONLY One who wore PPE, unfortunately however the PPE wasn't adequate for the procedure at hand.

She was to take samples from a dead horse who the snr vet believed had died from Hendra. It did, and thankfully she survived.

Records state that when she went to the hospital she showed symptoms of mild influenza.

██████████ a vet at the ██████████ who was the 1<sup>st</sup> person to contract the Hendra Virus while working at the clinic. (██████████ was the 2<sup>nd</sup>).

██████ did the Cause of Death Necropsy with an unknown illness on a horse at the clinic, and like ██████████ **Chose** Not to Wear PPE, **not even gloves!**

His doctor believed he was suffering from a Chest inflection, and prescribed steroids. He had initially been tested for the Hendra Virus, but it returned negative. But when ██████████ test returned positive, he had a second test that this time returned positive. It was later discovered that the steroids he'd been put on masked the early onset symptoms of the Hendra Virus in humans. In a later paper published with regard to the 7 human cases, made a very interesting comment....."If the steroids ████████ had been put on hadn't masked the early onset symptoms, if he'd started treatment just those 2 or 3 days earlier; **could he still be alive today?**"

But a much more important question to ask is....."If ████████ had **Chosen** to wear the correct PPE for the procedure, and followed the correct Protocols for the procedure would he still be alive today?" ..... The answer is a resounding **YES!**

██████████ was the very 1<sup>st</sup> of the Confirmed Human Cases to contract the Hendra Virus, when he assisted ██████████ in a Cause of Death Necropsy with an unknown illness for one of their own horses. A month prior to the outbreak at ██████████ racing stables.

His wife was unable to cut through the ribcage of the horse in order for her to get to the lungs; so [REDACTED] assisted by cutting through the rib cage for her.

He **Chose** not to wear PPE.

I have no knowledge whether his wife was or wasn't wearing PPE, although I doubt she was.

[REDACTED] was later taken to the hospital with what was initially thought to be meningitis, of which he recovered and returned home.

After [REDACTED] believing this was what [REDACTED] had also, sent off the tissue samples of the horse, and it was confirmed that it was the same virus that was involved.

[REDACTED] died 14 months later, and everyone has been told and believed [REDACTED] had been ill the entire time, and that he'd never really got over the initial infection, and had a relapse just prior to his death.

But prior to [REDACTED] death he was working in a piggery.

Anyone who knows anything at all about pigs knows you have to be very fit; and very strong to do this kind of work. Even just the process of feeding is strenuous.

So [REDACTED] could not have been weak and suffering prior to his so-called-relapse.

[REDACTED] father didn't believe his son's death was because of the Hendra Virus, and repeatedly requested that the death be again looked into. But all requests were denied.

[REDACTED] has never believed that the Hendra Virus killed [REDACTED] either. And also her requests fell onto deaf ears.

It wasn't until a later report was released that stated that at [REDACTED] autopsy the coroner didn't know what had been [REDACTED] cause of death! They knew it was different to [REDACTED] but had no idea. So they went looking for any evidence at all that allow them to rule his death by the Hendra Virus. They found it in his tissue.

There had been a mysterious virus that went through the piggery only 7 to 10 days prior to [REDACTED] becoming sick for the 2<sup>nd</sup> time; he died approximately 25 days later in hospital.

His brain scans are completely different to those of both [REDACTED] brain scans, and although in his lung biopsy you can see the early damage to [REDACTED] lungs from the Hendra Virus, but they were not the lungs of someone who had died from the active Hendra Virus and although they were similar to [REDACTED] they didn't show the same level of damage.

Do I believe [REDACTED] had contracted Hendra Virus while assisting [REDACTED] with the Cause of Death Necropsy?.....Yes

Do I believe [REDACTED] recovered from the Hendra Virus?.....Yes

Do I believe that the fact by suffering from the Hendra Virus 14 months earlier, that it played a major role in [REDACTED] death?..... Yes I do

But do I believe that the cause of [REDACTED] death was the Hendra Virus?..... No I don't.

I believe the mysterious virus that went through the piggery only prior to [REDACTED] becoming ill is most likely his cause of death. And this is why the coroner wasn't able to know what exactly it was that killed [REDACTED], thus actively searching for the Hendra Virus and finding it in his tissue.

That if he hadn't suffered from the Hendra Virus his immune system would have been able to fight off this other virus, that he would still be alive today.

Which brings us back to the infection of the Hendra Virus, Do I believe if [REDACTED] had worn the correct PPE and followed the correct Protocols when assisting [REDACTED]; would he be alive today?..... Yes I Do!

[REDACTED] is the final person who contracted the Hendra Virus, the final member of (or connection to) Veterinary Practitioner, and final person to die.

His death is also the saddest.

[REDACTED] like the others **Chose** not to wear PPE when he performed an endoscope examination of a sick horses lungs. This horse died shortly after and [REDACTED] tested positive to the Hendra Virus.

The correct PPE for this procedure is the same as for the Nasal Lavage:

- A clear full face shield
- Gloves

- clothing is to be worn that covers all exposed skin:
  - Overalls
  - Biohaz suit
  - Long sleeve shirt and closed collar
- Rubber boots with non-slip soles, these can also be steel capped

██████ was taken to the hospital, but instead of being put on a plane and sent to Princess Alexandra Hospital that had treated ██████ chose instead to treat him themselves.

They even Discharged Him!

The following day Alister returned and was readmitted, and it was now that he was flown down to Brisbane. But unfortunately too much time had passed and the treatment simply didn't have time to make a difference, the Hendra Virus had had too long to cause damage to his major organs.

He should never have died.

But sadder still is that if he had worn PPE and followed the correct protocols; he would never have become sick in the 1<sup>st</sup> place.

Infectious Diseases Protocols have been in place for much longer than 30 years. Even in college when we were to dissect a leg, or head, or any part of a horse, we had to follow full protocols, and follow the appropriate PPE for the procedure.

No vet, vet nurse, or person assisting a vet should ever be placed in danger of infectious diseases during examination, treatment or death, providing they wear the correct PPE for the procedure, and follow the appropriate protocols.

Name	Cause of infection
██████████	Failure to wear PPE while assisting in a Cause of Death Necropsy
██████████	Inadequate PPE while collecting samples from a dead horse.
██████████	Failure to wear Any PPE (not even gloves) while doing a Cause of Death Necropsy
██████████	Failure to wear Any PPE or follow Protocols for either of the 2 Hendra Virus positive horses she either treated or collected urine samples from (that we

	know of). Plus the second horse that she was observed collecting the urine sample in her Ungloved hands!
██████████	<b>Failure to wear PPE</b> while performing an endoscopic examination of a sick horses lungs.

**Of the 5 infections related to either a vet, vet nurse, or assisting a vet, 3 of them all involve work on a dead horse.**

- **Assisted in a Cause of Death Necropsy**
- **Assist with Cause of Death Necropsy (take samples from dead horse)**
- **Cause of Death Necropsy**

**Of the 3 other horses involved they were either very ill and died less than 24 hours later, or was euthanized.**

**Not 1 of these horses showed any signs of Colic, with the 2 who died within 24 hours later, both displayed respiratory symptoms.**

Of the 2 people Not a vet, vet nurse, or assisting a vet; ██████████  
 ██████████ Both became infected with the Hendra Virus while working together in the same Racing Stables. ██████████ was the trainer, and ██████████ senior Stablehand.

██████████ other stablehand didn't become sick.

It's believed that they were both infected with the Hendra Virus while using a Naso Gastric Tube to administer a tonic that ██████████ was well known to do.

Neither ██████████ **Chose** to wear any PPE, neither did they clean the Naso Gastric Tube in between horses, thus passing the Hendra Virus to many of the (until then), unaffected horses in his stable.

There is also the possibility that ██████████ may have become infected when he wrestled the initial Hendra Virus positive horse to the ground and was forced to sit on her head to prevent her from getting back up and continue to go crazy in her stable, causing further damage to herself, and destroying the stable, while he waited for the vet to arrive.

Unfortunately there was nothing they could do and euthanized her.

Did ■ assist ■ in wrestling the horse to the ground to subdue her, I don't know, but it's equally possible that either the Naso Gastric Tubing, or wrestling the horse to the ground that both ■ may have come in contact with infected respiratory fluids, or infected urine inside the stable with the mare.

■ was in breach of Protocol when he Chose to treat all the horses in the stable with his tonic when the mare had a temperature, rather than call the vet, neither he or ■ Chose to wear PPE while treating the horses.

But if it's from wrestling the mare down to subdue her; neither was in breach of regulation, except for failure to call a vet sooner.

When ■ started to become sick he believed it was a flare up of Ross River Fever, because of this he didn't seek medical assistance until he was gravely ill. The other factor of his death that needs to be taken into consideration is that because ■ was a Trainer, they can't take a sick day off, they work through it. So regardless ■ wouldn't have sort medical assistance until it was too late.

Ross River Fever like most reoccurring fevers have a detrimental effect on the immune system, so when Vic contracted the Hendra Virus he had an already compromised immune system, so regardless if he'd gone directly to hospital, his body simply wouldn't have been able to overcome the virus.

■ was admitted to hospital with Influenza like symptoms, but later tested positive to the same virus to ■ and the horses. Thankfully his immune system was strong enough to allow him to recover, and I believe he still works in the industry today.

## CONCLUSION

There are two things each of the 7 Confirmed Human Cases have in common; they all but one, Chose Not to wear PPE, or follow the Correct Protocols for the situation at hand.

Not one of these people have the right to call “Poor Me” as we see [REDACTED] do every time [REDACTED] steps on stage to get people to believe that it’s only via the use of a ‘Specific’ Vaccine that can “Save Your Life!”

No one held a gun to their head, or refused them to have access to, or wear the correct PPE, and follow the Protocols.

This was something they **ALL Chose** to do!

**By refusing to attend unvaccinated horses, vets are forcing owners into the situation [REDACTED] placed himself, and paid for that with his life.**

**Vets receive training in the handling of animals with infectious diseases, as are vet nurses. They have no excuse to blame the horse, the owner, the handler, or trainer who rarely has this type of training.**

**They know how to stay safe, they are simply **choosing** not to.**