

NEWSLETTER

June 2016

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GROWTH IN THE EQUINE HEALTH FUND TEAM



Dr John Grewar

Before we update you on the situation following the AHS related death in Paarl, we thought we should introduce you to our expanded team, who are all mentioned in the update.

The EHF is delighted to welcome Dr John Grewar to the team in the W Cape. We also welcome Esthea Russouw back from maternity leave, and Dr Phillippa Burger who has now taken up a full time position having worked part time for the past year.

Dr John Grewar joined the Equine Health Fund team on the 1 April 2016 as a senior researcher. John's responsibility is the development and implementation of surveillance systems and movement control systems for trade sensitive equine diseases focussing on the facilitation of trade.

John completed his Bachelor of Veterinary Science (BVSc) degree at the end of 2006 at the University of Pretoria and immediately enrolled for an MSc (Veterinary Science) under the supervision of Prof. Alan Guthrie of the Equine Research Centre. Three years later he was awarded his Master's degree for his dissertation titled the "Use of temperature sensitive microchip transponders to monitor body temperature and pyrexia in Thoroughbred foals".

John started working as an epidemiologist in the State department of Agriculture, Veterinary Services in the Western Cape in October 2009 until he moved across to the Equine Health Fund on the 1 April 2016. Since 2009 he has been the primary author in 3 peer reviewed journal publications with research themes of outbreak investigations in equines of Annual Rye Grass toxicity, Equine Encephalosis and African horse sickness respectively. He has also co-authored a further 7 publications involving general themes of social network analysis, avian influenza, landscape ecology and PCR testing of African horse sickness. Along with the mentioned research topics he has an interest in the management of data and the attempt to streamline data flow within organisational structures within the veterinary epidemiologic environment. He was president of the Southern African Society of Veterinary Epidemiology and Preventive medicine from 2011 through 2013 and received several awards including the South African Veterinary Association Young Veterinarian of the Year Award in 2011 and the Southern African Society for Veterinary Epidemiology and Preventative Medicine Willie Ungerer Memorial Epidemiology Prize in 2014.

We congratulate *Dr Phillippa Burger* (left) who recently achieved her Masters cum laude. Phillippa is a valuable addition to the EHF team, and assists Dr Camilla Weyer on surveillance and outbreak management in the Western Cape.

Dr Phillippa Burger

OUTBREAK OF AFRICAN HORSE SICKNESS IN PAARL - UPDATE

(This is a short extract summarised from the final outbreak situation report issued by the Western Cape Department of Agriculture on the 13 June 2016)

"Movement restrictions as a result of the Paarl AHS cases have been lifted as of 13 June 2016 after a period of 40 days had elapsed since the last detected case in May 2016. Including the initial case, 21 horses on eight properties within the established containment zone tested positive for infection with AHS virus. Six of these horses experienced clinical signs of illness, resulting in a total of four deaths.

Written requests for AHS vaccination in the AHS surveillance zone will once again be considered by the Boland State Veterinary office."

The focus of the EHF fund team will now be on publishing a report on the outbreak which details the surveillance, movement control and epidemiology of the event in order to better understand events of this nature and help in future prevention and control thereof.

Gloria Kilian posted a message on Facebook at the start of the outbreak: "I would like to publicly say a huge big thank you to Camilla Weyer, Danielle Pienaar, Philippa Burger and John Grewar from the Equine Research Team. When I was notified yesterday of the AHS case very close to my yard these four people worked tirelessly all afternoon to take blood samples from each and every horse in my yard and add them all to their database to monitor over the next few weeks. Many people in the horse community are so quick to get angry when a situation like this arises. I listened to Camilla and Danielle endlessly and repeatedly answering hundreds of calls all afternoon until late evening from concerned horse owners and show holding bodies. I have to give the highest praise to them for their patience and dedication that they give to our entire equestrian community and to our sport. Thank you - thank you - thank you!!!!"

PUBLISHED SCIENTIFIC STUDY CONFIRMS THAT THE RISK OF EXPORTING AFRICAN HORSE SICKNESS IS NEGLIGIBLE

About the scientific study:

The recent risk assessment for African horse sickness (AHS) in horses exported from South Africa has now been published in the prestigious peer-reviewed international scientific journal, PLOS ONE confirming that the work is scientifically valid.



Dr Evan Sergeant, AusVet

According to lead author, Evan Sergeant, an internationally renowned epidemiologist from AusVet, "The likelihood of undetected AHS infection in horses exported from South Africa can be minimised by appropriate risk management measures, including vector-protected pre-export quarantine and PCR testing in a low-risk area for AHS, such as the current Free Zone in the Western Cape.

Based on model results there would be an average of one undetected infected horse exported for every 185,000 horses exported from the low-

risk area, assuming no post-arrival quarantine.

This equates to an annual probability of 1.6 cases per thousand years, assuming 300 horses exported per year. Post-arrival vector-protected quarantine and additional PCR testing would further reduce this likelihood.

The final choice of risk management measures required depends on the level of risk acceptable to the importing country, and this publication will now assist importing countries in making accurate, science based decisions regarding AHS exposure risk.

Link to paper:

http://journals.plos.org/plosone/article?id=10.1371/journal.pone.0151757

Says Prof Ian Sanne, Founding Director of the Equine Health Fund, who commissioned the risk assessment, "The implication of these findings is that the gates have swung open much wider for the export of South Africa's sought after racehorses, endurance horses and sports horses. The depreciation of our

Prof Ian Sanne

currency also augurs well for this industry. We are currently exporting around R250 million per year but this can easily increase to R1 billion."

"Import and export conditions are negotiated between the veterinary administrations of two countries. One of the important factors importing countries take into account is the level of risk an import poses. A sound risk assessment such as the one that has just been published, allows the importing country to make decisions based on science."

African Horse Sickness (AHS) has been affecting South African horse exports for decades and key stakeholders in the industry have been working to find long term solutions to these challenges. In 1997 a small free zone was established in the Western Cape, enabling horse exports to the European Union (EU). However, trade has been disrupted several times due to regular outbreaks of AHS in the controlled area. Currently, the country is losing out on investment because of the onerous and expensive process of importing horses from South Africa.

Mike de Kock, a top racehorse trainer comments, "South African horses are very competitive on the world stage and our results speak for themselves. Our horses are in demand but we have difficulty with delivery which is hurting this industry financially. With efficient export we could create thousands of jobs and bring in massive foreign investment."

For South Africa to regain free zone status with the European Union and OIE (World Organisation for Animal Health), it takes two years without outbreaks, followed by submission and consideration of a dossier. The recent outbreak in Paarl fell within the qualifying two year free period. In the words of leading breeder, Mick Goss, "it is by no means the end of the world".

Mr Goss went on to say: "What this outbreak does prove is the effectiveness of the excellent work which has been done on the surveillance side, plus we now have the considerable added advantage of PCR testing in place. Besides, the measures proposed by an independent international body like AusVet in limiting risk is a dimension we were never able to offer in the past."



SAEF MEMBER CONTRIBUTIONS AMOUNTING TO R119 360 WILL BE WELL SPENT

EHF thanks the SAEF members for their contribution, through horse registration levies, towards the fight against African horse sickness. These funds have been paid directly to the Equine Research Centre and will be used for African horse sickness surveillance in the AHS infected zone of South Africa, with the aim being to document the AHS virus types circulating in the infected area. The total budget for 2016 for this ongoing project is R200 000. In the project, incurred samples collected from horses showing clinical signs indicative of AHS are subjected to investigation. Results of these tests are reported directly to the Department of Agriculture, Forestry and Fisheries (DAFF) for incorporation in their official reports of AHS occurrence in South Africa. A total of 411 cases have been opened as part of this study since 1 September 2015, and these included examination of samples from in excess of 600 horses. (Each African horse sickness season runs from 1 September – 31 August.)

WHY SHOULD HORSES BE VACCINATED AGAINST EQUINE INFLUENZA EVERY 6 MONTHS?

All the vaccine manufacturers provide data in their package inserts which states that the vaccine will protect infected horses "from clinical signs" for a period of 1 year. Most equestrian sporting bodies require horses to be vaccinated every 6 months.

The difference in times relates to the duration of immunity providing "protection against infection" versus "protection from clinical signs". As you approach the latter months leading up to a year after EI vaccination, a horse can be infected with EI but show no clinical signs (i.e. it may be a Trojan Horse that can unwittingly be shedding virus at events). Therefore, responsible equestrian sporting bodies require that horses are vaccinated every 6 months and thereby ensure that the vast majority of the horses that are competing are "protected from infection". This reduces the chances of subclinical EI being transmitted at events.

It is a fact of life that a large proportion of horses that do not compete in events but remain at home are not vaccinated. Therefore, if there was sub-clinical infection of horses protected from clinical signs at shows and this was then taken "home" it has the potential to result in explosive outbreaks which would be blamed on the sporting body that organised the event. Furthermore, these sporting bodies derive their income from such events and such an outbreak would result in cancellation of events with a direct effect on the income of these sporting bodies.

HORSE IMPORT EXPORT TASK TEAM INDUSTRY REPORT

Visit the Equine Health Fund website on

http://www.equinehealthfund.co.za/Portals/0/Report%20for%20Industry %20HIETT %20meeting% 205%20February%202016%20DRAFT BP.pdf for the latest HIETT Industry Report.

LIST OF CONTROLLED AND NOTIFIABLE DISEASES

On the next page you will find the latest list of controlled and notifiable diseases published by the Department of Agriculture, Forestry and Fisheries (DAFF).

A controlled animal disease is an animal disease:

- the suspicion or confirmation of which, by law, must be reported to the nearest state veterinarian and
- control measures have been prescribed.
 (In addition, any animal disease which is not indigenous or native to South Africa is automatically a controlled animal disease.)

A notifiable animal disease is an animal disease:

the suspicion or confirmation of which, by law, must be reported to the nearest state veterinarian.



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LIST OF CONTROLLED AND NOTIFIABLE ANIMAL DISEASES IN TERMS OF THE ANIMAL DISEASES ACT, 1984 (ACT NO 35 OF 1984)

- Controlled Animal Diseases

 Any animal disease or infectious agent that is not known to occur in South Africa
 African horse sickness (AHS)
- African swine fever (ASF)
- Anthrax
- Aujeszky's disease
- Bacterial kidney disease (in fish)
 Bovine contagious pleuropneumonia (CBPP)
- Bovine spongiform encephalopathy (BSE) Brucellosis (in all animal species) Classical swine fever (CSF)

- Contagious equine metritis (CEM)
 Contagious haemopoeitic necrosis (in fish)
- Contagious pancreatic necrosis (in fish) Corridor or Buffalo disease (Theilerioses)
- Dourine East Coast fever
- Equine infectious anaemia (EIA) Equine influenza (EI)
- Equine viral arteritis (EVA) Foot and mouth disease (FMD)
- Glanders
- Haemorrhagic septicaemia (in fish) Johne's disease (in sheep, cattle and goats)
- Koi herpes virus disease Nagana (Trypanosomiasis)
- Newcastle disease
- Notifiable avian influenza (NAI)
- Porcine reproductive and respiratory syndrome (PRRS)
- Psittacosis
- Rabies
- Rinderpest Salmonella Enteriditis
- Salmonella Gallinarum (Fowl typhoid) Salmonella Pullorum (Bacillary white diarrhoea)
- Scrapie
- Sheep scab
- Skin conditions in sheep
- Swine vesicular disease
- Tuberculosis (in all animal species)

- Notifiable Animal Diseases

 Bovine malignant catarrhal fever (Snotsiekte)
- Bluetonque
- Lumpy skin disease
- Rift Valley fever
- Strangles
- Swine erysipelas

Dr Mpho Maja

DIRECTOR OF ANIMAL HEALTH

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