Newsletter

Veterinary Board of the Northern Territory

AUGUST 2017

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BOARD MEMBERSHIP

Position	Name
President (*ex-officio* - Chief Inspector of Livestock)	Dr Kevin de Witte
Vice President (elected veterinarian)	Dr Ian Gurry
Member (elected veterinarian)	Dr Shane Bartie
Member (appointed Veterinarian)	Dr Elizabeth Stedman
Public Interest Member (appointed non-veterinarian)	Marion Davey
Administrative Officer (Board Registrar)	Sue Gillis

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REGISTRATION RENEWALS

Registration renewals for 2018 will be forwarded out on 31 October 2017 by email and through Australia Post.

Please be aware that your registration ceases on 31 December 2017 therefore ensure that you have forwarded your registration renewal form through to the Registrar before 31 December.

You can email renewal form to vetboard@nt.gov.au. Or fax to 89 99 2089 or post your renewal form to GPO Box 3000 Darwin NT 0801.

UPDATING CERTIFICATE IV IN VETERINARY NURSING

Consultation with the veterinary industry concerning updating Certificate IV in Veterinary Nursing

Skills Impact is undertaking a project on behalf of the Rural and Related Industry Reference Committee and funded by the Australian Industry Skills Committee to update the existing nationally accredited qualifications in veterinary nursing.

This project has involved consultations with industry and establishment of a Technical Advisory Committee made up of veterinary nurses and veterinarians.

More details about this project can be found on the Skills Impact website
www.skillsimpact.com.au/animal-care/training-package-projects/veterinary-nursing/

The final drafts of the qualification will also be made available on the Skills Impact website in the next few weeks.

2016 AUSTRALIAN VETERINARY WORKFORCE SURVEY

The results of the 2016 Australian Veterinary Workforce Survey have been finalised and the survey report is publicly available on the AVA website at:

www.ava.com.au/sites/default/files/AVA_website/pdf/AVA-Workforce-Survey-2016-Final.pdf

The purpose of the survey is to examine the current profile of the veterinary profession and anticipate future trends and changes.

The information helps the profession, government, veterinary boards, universities and others to understand how the provision of veterinary services may be affected by various factors and allows for appropriate workforce planning to ensure sustainable veterinary services are available where they are needed into the future.

ANU RESEARCH SURVEY – COMMUNICATING WITH VETERINARY PRACTITIONERS IN TERMS OF BIOSECURITY ALERTS

The Australian National University science communication researchers are kindly asking registered veterinary practitioners within Australia to fill out a short online survey (which should take no longer than 10 minutes) about their communication preferences in regards to receiving animal biosecurity information.

Survey Link: https://www.surveymonkey.com/r/vetbiosecurityinfo

Why do they want to know? Updating veterinary practitioners on the latest biosecurity information relating to domestic and exotic animal health and disease alerts is of the utmost importance to enhance knowledge of this information in the sector and so that the most up to date information is being communicated to domestic animal owners.

The aim of this project is to better understand how to communicate with you (veterinary practitioners) in times of both notifiable and non-notifiable biosecurity alerts and animal disease outbreaks. The results will ensure that current and future communications in this space are tailored to mediums which veterinary practitioners are regularly engaged with diagnoses. Would you be able to recognise the signs of PPR? If not, see:

agriculture.gov.au/pests-diseases-weeds/animal/ead-bulletin/ead_bulletin_no_105

This survey is being undertaken as part of an Australian National University Master of Science Communication Research Project (ethics approval number 2017/317).

The survey results will be published within the scientific literature and the findings will be publicised through veterinary groups.

Survey participants remain anonymous and no contact details are requested only demographic data.

Queries, concerns or for more information:
Primary investigator: Dr Ian McDonald (completing a Master of Science Communication)
Tel: 0439 746 556 | Email: ian.mcdonald@anu.edu.au

The ethical aspects of this research have been approved by the ANU Human Research Ethics Committee (Protocol 2017/317). If you have any concerns or complaints about how this research has been conducted, please contact:

Ethics Manager
The ANU Human Research Ethics Committee
The Australian National University
Telephone: +61 2 6125 3427
Email: Human.Ethics.Officer@anu.edu.au

FROM THE REGISTRAR

In May this year the Veterinary Board Registrar attended the yearly Veterinary Board Registrars Meeting and the Australasian Veterinary Boards Council AGM. The following dot points are just some of the issues discussed between the States/Territories and New Zealand and there are issues for the NT Board to discuss with the review of the Northern Territory *Veterinarians Act*, Regulations and Code of Conduct.

- CPD on Ethical Behaviour – potential for further education and/or assessment in matters of professional conduct and ethical behaviour
- Telemedicine – emerging issues - potential issue identified in establishing jurisdiction under NRVR and para-professionals undertaking clinical examinations of an animal would potentially fall under the definition of an *act of veterinary science* and as such para-professionals would require registration to allow this practice.
- Government Veterinary Practitioners - On Plant Abattoir Veterinarians and registration of these vets
- Issues under National Recognition of Veterinary Registration (NRVR) including Principal Place of Residence and difficulties in tracking vets in jurisdictions
- Movement of Veterinary Practitioners across jurisdictions – repeatedly offend and move between jurisdictions under NRVR
- AVBC National Database – potential concerns discussed
- Fitness to Load Certificates - certificates for animals that due to injury or disease are in no fit state to travel. WA have had several cases of On Plant Abattoir Veterinary Surgeons reporting that animals certified by vets as fit to travel have arrived with broken legs, infected injuries etc.

HELP US TO UNDERSTAND HOW Q FEVER OCCURS IN AUSTRALIA - SURVEY

You are invited to take part in a research study about the awareness amongst Australian dairy and beef cattle farmers about the knowledge, attitudes and practices of Australian dairy and beef cattle farmers regarding Q fever. The findings from this study will help identify areas for further research and assist in developing supplementary material for dairy and beef cattle producers. Link: *https://www.surveymonkey.com/r/NationalQF*

The Northern Territory only has sporadic cases of Q Fever.

LOUIS PASTEUR SUCCESSFULLY TESTED HIS RABIES VACCINE ON THIS DAY (6 JULY) IN 1885

Pasteur had begun work on a vaccine in 1882, using a weakened form of the rabies virus taken from the spinal cords of infected animals. The research was time-consuming, because it took several weeks for the virus to reach his test animals' brains after they were infected, but Pasteur soon realized that people didn't need to have the vaccine on board before they were bitten, as with other diseases. The delay between the rabid animal's bite and the outbreak of the disease meant the vaccine could be given only when needed, and it would have plenty of time to work.

In 1885, a nine-year-old boy named Joseph Meister was bitten by a rabid dog. He was brought to Pasteur, and though Pasteur didn't feel his vaccine was sufficiently tested yet, he knew the boy would certainly die otherwise, so he took a chance. It was a tense few weeks waiting to see if Meister would come down with the disease, but the boy recovered, and three months later was pronounced in good health. Pasteur's fame spread quickly, and the era of preventative medicine had begun.

Are you vaccinated against rabies?

Veterinary clinic staff who handle bats should consider becoming vaccinated against rabies. Rabies vaccination can be accessed via a general medical practitioner. The cost is approximately $100 per vaccine.

Pre Exposure Rabies Vaccine Course (3 dose) Schedule:-
* 1st dose is given on Day 0
* 2nd dose given on Day 7
* 3rd dose given on Day 21 – 28.

Once vaccinated it is recommended that serology (Rabies/Lyssavirus) is checked every 2 years.

In addition, if you are exposed (scratches, bites, licks to broken skin, etc.) to a bat you **still need to seek medical attention** and contact the Hospital or Centre for Disease Control on 1800 008 002 to arrange **post-exposure treatment**.

NT Health CDC vaccine information and contacts:
https://nt.gov.au/wellbeing/healthy-living/immunisation/your-job-and-vaccinations
NTG ABLV page: https://nt.gov.au/wellbeing/health-conditions-treatments/viral/bat-lyssavirus

RETAILERS ADVISED NOT TO HORSE AROUND WITH UNREGISTERED VETERINARY CHEMICAL PRODUCTS

Retailers are advised to use caution when stocking veterinary chemical products for use in or on horses, following Australian Pesticides and Veterinary Medicines Authority (APVMA) concern that a number of natural horse products may not be registered.

According to APVMA CEO Dr Chris Parker, the regulator is seeing a number of veterinary chemical horse products claiming to be natural, organic or chemical-free on the market that are not APVMA registered and are therefore illegal to import, possess, advertise and supply.

“The definition of a veterinary product is broad and inclusive under Australian law. This means both natural and man-made substances are regulated by the APVMA if they claim to have a therapeutic effect on an animal.

“The market for veterinary horse products has expanded in recent years and many new products marketed as natural, organic, or chemical-free may not have been assessed by the APVMA,” Dr Parker said.

“It’s a concern because some of these products claim to have a therapeutic effect or enhance the physical qualities of horses, but have not been independently assessed to confirm they are actually safe or work as claimed.

“Businesses have a duty of care to make sure the veterinary chemical products they promote and supply in Australia are registered.”

To raise awareness of the requirements for veterinary chemical product registration, the APVMA is running a targeted campaign to inform Australian retailers of their obligations and help consumers recognise a registered veterinary chemical product before purchase.

Both retailers and consumers are encouraged to check product labels for an APVMA approval number.

Dr Parker also cautioned against buying veterinary chemical products directly from overseas.

“Just because a product is registered for use in another country, does not mean it’s legal to import, supply and use in Australia,” Dr Parker said.

If you have bought a product that you think should be registered but doesn’t have an APVMA approval number on the label, please contact the APVMA at compliance@apvma.gov.au or call 1300 700 315.

Learn more about natural veterinary horse products and your responsibilities at www.apvma.gov.au/horse-products
Further information**: APVMA Media | 0467 726 486 | media@apvma.gov.au**

NEW STRAIN OF CANINE PARVOVIRUS DISCOVERED IN AUSTRALIA

A new form of the common and highly contagious canine parvovirus (CPV) has been discovered in Australia by researchers at the University of Adelaide.

While the new strain, known as CPV-2c, is spreading around the world, until now there has been no confirmed evidence of its presence in Australia. However, according to the research, over the past two years confirmed cases of CPV-2c have occurred in South Australia and Victoria, with suspected cases also occurring in Queensland and Northern Territory.

While more work needs to be done to understand the new strain, veterinarians need to be aware that CPV-2c is now in Australia and the research found that in most cases, in-clinic diagnostic tests have shown negative results in infected animals. Also, most of the cases reported have occurred in dogs already vaccinated against parvovirus, although the clinical signs are typically milder than in unvaccinated dogs.

Until more is known, it’s important that dog owners continue to vaccinate for CPV, and take their dogs to the vet if they are unwell. Signs of CPV infection include some or all of the following: decreased appetite, lethargy, vomiting and diarrhoea. CPV has a high mortality rate.

The research has been published in *Viral Immunology* and the researchers have deposited the full genome sequencing information for studied cases with GeneBank.

A national survey of veterinary clinics relating to Canine Parvovirus is currently underway, run by researchers at the University of Sydney. The survey, which will close very shortly, is for all qualified veterinarians in small animal practice, including those who don’t see Parvovirus. Any veterinarians whose clinic has not yet done the survey are encouraged to email the lead researcher, Dr Mark Kelman at kelmanscientific@gmail.com and the survey will be provided.

CATS SHOWING A COMBINATION OF CEREBELLAR AND VESTIBULAR SIGNS

The AVA has become aware of a small number of reports of cats showing a combination of cerebellar and vestibular signs. The issue could be related to a pet food toxicity or deficiency, and this is being investigated.

At the moment the AVA are waiting on laboratory testing, which will take up to 10 days. In the meantime, we would ask that members submit any suspect cases through to us using the PetFAST reporting scheme.

PetFAST (Pet Food Adverse Event System of Tracking) is a joint initiative of the AVA and Pet Food Industry Association of Australia (PFIAA). See: www.ava.com.au/petfast

You can lodge a PetFAST report here: www.ava.com.au/webform/petfast-report

If you suspect a case, the following people can be contacted for advice on case management and testing:

Dr Sue Foster: sfoster01@bigpond.com or 0423 783 689

Dr Linda Fleeman: l.fleeman@animaldiabetesaustralia.com.au

Dr Kath Briscoe and/or Dr Jody Braddock at Animal Referral Hospital (ARH), Homebush, Sydney: (02) 9758 8666.

RABBIT CALICICVIRUS

In April and May 2017, Berrimah Veterinary Lab (BVL) received two apparently separate cases of single pet rabbits dying fairly suddenly with not much in the way of pathology except mild non-suppurative encephalitis of unknown aetiology (maybe old mild and possibly incidental E. cuniculi infection). Although rabbit calicivirus infection was not suspected based on a lack of consistent pathology (should have liver necrosis and haemorrhagic syndrome), because one of the submitters specifically requested rabbit calicivirus testing, we sent liver from both cases to Biosecurity SA (which performs testing at no charge since they do surveillance for the RHD viruses 1 and 2).

Surprisingly, recently both have come back as positive for RHDV2 (the virus found in Australia in 2015, not the original rabbit haemorrhagic disease virus (RHDV1) deliberately released to control feral rabbits). If further in contact rabbits die BVL will do testing at no charge since we are interested in gaining further information on the presence of these viruses in the NT.

EMERGENCY ANIMAL DISEASE ALERTS

Whilst Hendra and Australian Bat Lyssavirus continue to be the most common NT Emergency Animal Diseases exclusions, the Department of Primary Industry and Resources (DPIR) has specific interests in gaining samples from the following suspect cases:

- Brucella suis in canines
- Fly maggots (screw worm fly) from any wound
- Equine blood samples and nasal swabs from any undiagnosed horse illness in all areas.

All suspect EAD are Notifiable Diseases under the NT Livestock Act and need to be reported by veterinarians (and livestock owners and managers) to the Chief Inspector within 24 hours after becoming aware of it or forming the suspicion about it.
Chief Inspector – telephone: 08 8999 2130 or EAD Hotline: 1800 675 888.
DPIR Biosecurity contacts: https://www.nt.gov.au/industry/agriculture/livestock/animal-biosecurity-fees-contacts

EAD ALERTS FROM THE DEPARTMENT OF AGRICULTURE AND WATER RESOURCES

Lumpy skin disease

Since it was reported in western Turkey in May 2015, lumpy skin disease (LSD) has subsequently spread to Russia and the Balkan countries of Greece, Bulgaria, the former Yugoslav Republic of Macedonia, Serbia, Kosovo, and Albania. A recent study reports the median spread rate during this outbreak to be 7.3 km/week. Insect vector and cattle trade movements were both identified as drivers for LSD spread.

An epidemiological analysis and review of risk factors for LSD spread undertaken by the European Food Safety Authority recommends vaccination and vector surveys for LSD control in Europe.

onlinelibrary.wiley.com/doi/10.2903/j.efsa.2017.4773/epdf?utm_source=POLITICO.EU&utm_campaign=7aec8d4079-EMAIL_CAMPAIGN_2017_04_20&utm_medium=email&utm_term=0_10959edeb5-7aec8d4079-189899961

An outbreak of LSD in Australia could result in significant economic losses due to trade and movement restrictions, outbreak response activities, decreased production and damage to hides. It is important that Australian veterinarians maintain current knowledge and remain alert to exotic disease risks, to ensure rapid recognition and response to a potential outbreak. Early detection and laboratory confirmation is key to effective LSD response.

Would LSD be on your differential list for generalised skin disease in cattle? If not, see:
animalhealthaustralia.com.au/our-publications/ausvetplan-manuals-and-documents/
FAO LSD – A field Manual for Veterinarians: http://www.fao.org/3/a-i7330e.pdf

Mycobacterium ulcerans

Buruli (or Bairnsdale) ulcer is a serious necrotising cutaneous infection caused by *Mycobacterium ulcerans.* Human cases have been reported in over 30 countries across Africa, South America, Asia, and the Western Pacific region. In Australia, laboratory-confirmed cases have been reported in humans, wildlife and domestic species including horses, dogs and cats. Infection with *M. ulcerans* is a notifiable human disease, and the Victorian Department of Health and Human Services has reported a steady increase in human cases of Buruli ulcer since August 2016. Although considered an environmental bacterium, possums are recognised as a potential reservoir host. Veterinarians and wildlife workers are advised to use appropriate precautions and PPE when handling wildlife with skin ulcers. wildlifehealthaustralia.com.au/Portals/0/Documents/FactSheets/Public%20health/Mycobacterium%20ulcerans%20disease%20Dec%202010%20(2.2).pdf

Mycobacterium ulcerans has been occasionally recorded in people in the NT but a case could always be imported with a travelling person or animal. There is no information on the NT CDC website but there is an interesting page on non-healing human ulcers: https://nt.gov.au/wellbeing/health-conditions-treatments/bacterial/non-healing-ulcers

Peste des petits ruminants (PPR)

Peste des petits ruminants (PPR) is a highly contagious viral disease of sheep and goats caused by a *Morbillivirus* of the family *Paramyxoviridae*, believed to have evolved from the rinderpest virus. PPR is transmitted via direct contact and often results in high morbidity and mortality, with a characteristic fever, necrotic stomatitis, enteritis and bronchopneumonia. It can be misdiagnosed as bacterial pneumonia due to secondary infections.

In the past two decades PPR has spread rapidly across 76 countries; mostly in Africa, Asia and the Middle East. Globally, the virus is estimated to cause $2 billion in losses each year. In January 2017, PPR was confirmed as the cause of a mass mortality of critically endangered saiga antelope in Mongolia, marking the first detection in free-ranging antelope. promedmail.org/

PPR has never occurred in Australia, but an outbreak would affect both local and export markets, and cause serious losses in the sheep and goat industries. PPR should be suspected when goats or

sheep are affected with an acute febrile diarrhoea accompanied by erosions of the mouth lining and high morbidity and mortality, or where there is a high incidence of pneumonia. If rapid spread from animal to animal is occurring, and animals of all ages are sick and dying, then you should consider PPR in your list of differential diagnoses.

Would you be able to recognise the signs of PPR? If not, see:

agriculture.gov.au/pests-diseases-weeds/animal/ead-bulletin/ead_bulletin_no_105

African swine fever

Outbreaks of African swine fever (ASF) continue in Lithuania, Moldova, Poland, Russia and the Ukraine. A study published in the Journal of Wildlife Diseases reports development of a new serological pen-side test to support emergency management and surveillance for ASF in the field. The test was found to have a lower sensitivity (81.8%) and specificity (95.9%) than gold-standard laboratory tests, but provided a cheaper test option and more rapid results.

jwildlifedis.org/doi/pdf/10.7589/2016-05- 112?ai=1vdn&ui=fe8l&af=H.

Sampling for prion diseases

Cases of atypical bovine spongiform encephalopathy (BSE) were reported in adult cattle in Spain and Ireland, while classical scrapie was reported in Iceland. These diseases are types of transmissible spongiform encephalopathies (TSEs) caused by the accumulation of abnormal prion proteins in the central nervous system.

Australia is recognised by the World Organisation for Animal Health (OIE) as a country of negligible risk for BSE and is also free from classical scrapie. To assure trading partners that Australian animals and animal products remain free from TSEs, collection and testing of samples from sheep and cattle with clinical signs consistent with TSEs is coordinated through the National TSE Surveillance Program.

Did you know subsidies are available to investigate suspected cases of TSEs? See:
animalhealthaustralia.com.au/wp-content/uploads/2015/11/NTSESP-Field-Guidelines-2016-17_final.pdf

NT Department Primary Industry and Resources Contact: 1800 675 888

Global AI Update

Outbreaks of avian influenza have occurred across multiple regions. A selection of the most notable events are reported below.

H7N9 (China)

The fifth annual wave of avian influenza A(H7N9) in China is ongoing, with a significant increase in reported human cases compared to previous years. The majority of human cases have a recent history of close contact with infected poultry or their environments. In previous waves only H7N9 low pathogenic avian influenza (LPAI) viruses were detected. Sequencing of samples from the current wave has also confirmed involvement of H7N9 highly pathogenic avian influenza (HPAI) viruses.

fao.org/ag/againfo/programmes/en/empres/h7n9/situati on_update.html

H7N9 (United States)

In March 2017, the US reported outbreaks in poultry of both H7N9 HPAI and H7N9 LPAI, caused by a North American wild bird lineage virus. According to the Centres for Disease Control and Prevention, these viruses differ to those currently circulating in China and pose a low public health risk. cdc.gov/media/releases/2017/s0308-h7n9.html

H7N2 (United States)

A human case of influenza A (H7N2) was confirmed in the US in December 2016 in a veterinarian following exposure to infected cats at an animal shelter. The case marks the first recorded transmission of the strain from cats to humans. Human-to-human transmission has not been documented.

H5N8, H5N5 & H5N6 (Europe)

Following detection of H5N8 HPAI in a wild bird in Hungary (October 2016), the virus has since been detected in wild birds in a further 22 EU member states, and in poultry in 17 member states. In addition, H5N5 HPAI and H5N6 HPAI have also been reported in poultry. The European Commission provides a detailed map and chronology of events:

ec.europa.eu/food/sites/food/files/animals/docs/ad_contr ol-measures_hapai_chrono_2017_map.pdf

The *H5N8 HPAI global situation update* from the Food and Agriculture Organization also highlights the pandemic potential and recent intercontinental spread of the H5N8 HPAI virus to Africa, Asia, Europe and the Middle East. fao.org/ag/againfo/programmes/en/empres/H5N8/situati on_update.html

Recent publications

Hendra virus risk perceptions

Researchers have developed a conceptual model to investigate risk perceptions and coping factors associated with uptake of Hendra virus risk mitigation practices amongst non- and partially-vaccinating horse owners. The role of veterinarians in promoting Hendra risk mitigation was identified as more influential than that of respected peers or friends.

onlinelibrary.wiley.com/doi/10.1111/tbed.12588/abstract

The role of fomites in disease spread

Researchers have shown that looking at movements of operators and vehicles between farms in the same way we look at contacts in social networks can help explain the spread of infectious diseases of livestock, such as FMD and HPAI. This research may contribute to the development of more accurate tools for predicting the spread of livestock diseases and may help implement more effective on-farm biosecurity measures. journals.plos.org/ploscompbiol/article?id=10.1371/journal.p cbi.1005301

Coalition for Epidemic Preparedness Innovations

A global partnership to stimulate innovation and part-finance the development of new vaccines for epidemic infectious diseases was launched in January 2017. The Coalition for Epidemic Preparedness Innovations will initially focus on development of candidate vaccines for humans against three important zoonoses: MERS-CoV, Lassa and Nipah viruses. cepi.net/cepi-officially-launched