



# Newsletter

Veterinary Board of the Northern Territory

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DECEMBER 2017

## BOARD MEMBERSHIP

Position	Name
President ( <i>ex-officio</i> - 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
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Administrative Officer (Board Registrar)	Sue Gillis

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## SEASONS GREETINGS FROM THE BOARD

The NT Veterinary Board members wish you all the best for a festive and relaxing Christmas break and a prosperous and peaceful 2018.

## LETTER FROM AUSTRALIAN GOVERNMENT CHIEF VETERINARY OFFICER

Dear colleague

### Responsible and Prudent Use of Antimicrobials in Veterinary Practice

I am writing to you on the issue of antimicrobial resistance (AMR), identified as a critical global issue, with the World Health Organisation describing it as an 'urgent global health priority'.

This is a timely reminder to reflect on the significant role we, as veterinarians, play in limiting and minimising the spread of AMR. A number of representations have been made to me on this issue from animal health professionals and organisations. I am therefore seeking your cooperation as we collectively address this complex issue with our counterparts in human health, both here and overseas.



I have been working on AMR for a several years now, and together with the Australian Chief Medical Officer, I co-Chair the *Australian Strategic and Technical Advisory Group on Antimicrobial Resistance*. We have collaborated with governments, non-government organisations, professional bodies (such as the Australian Veterinary Association and veterinary faculties), research organisations and our human health counterparts to shape Australia's first *National AMR Strategy 2015-2019* and associated *Implementation Plan*.

As a member of the World Organisation for Animal Health (OIE), Australia has also contributed to the development of the *OIE Strategy on Antimicrobial Resistance and the Prudent Use of Antimicrobials*. Australia continues to work with the international animal health community through contributions to the OIE to address the issue of AMR, such as the development of *OIE Code Standards relating to AMR*.

Our work internationally also facilitates exports to overseas markets, taking advantage of our favourable public health, animal health and environmental health status. As veterinarians, we play a role in protecting this with regard to AMR, to safeguard public health and support our export industries. To avoid AMR becoming a future barrier to trade, we need to prepare now and implement changes, such as to our prescribing habits.

As veterinarians, our prescribing rights come with significant responsibilities. As a prescribing veterinarian, you can help minimise the spread of AMR by:

1. Pausing and considering each antimicrobial prescription.
2. Talking to clients about ways to minimise the use of antimicrobials.
3. Promoting and applying best practice biosecurity and hygiene measures.
4. Using published therapeutic guidelines, where available.

Veterinarians should also base their choice of antibiotic on culture and sensitivity testing, where possible.

I wish to reassure you that the Australian Chief Medical Officer is also working closely with our human health colleagues to remind them of their responsibilities. The veterinary and medical professions need to work together to ensure a combined, global effort towards preserving the effectiveness of important antimicrobials for the necessity of human health, and animal health and welfare.

Veterinarians are part of the solution to safeguard the efficacy of antimicrobials. Your commitment to minimise the spread of AMR contributes to the collective national efforts of the medical and veterinary professions to preserve the effectiveness of antimicrobials.

Further information on national AMR activities can be accessed at

<http://www.agriculture.gov.au/animal/health/amr>, and international activities at <http://www.oie.int/en/for-the-media/amr/>. In addition, you may find my plenary address on antimicrobial resistance at the Australian Veterinary Association's 2017 Annual Conference useful. A recording is available to download at <http://agriculture.vic.gov.au/amr>. I note that fighting antimicrobial resistance is also

one of the Australian Veterinary Association's strategic priorities, with a number of resources available at <http://www.ava.com.au/amr>.

Should you wish to discuss the issues raised in this letter, please email:

[AMR@agriculture.gov.au](mailto:AMR@agriculture.gov.au).

Yours sincerely  
Dr Mark Schipp  
Australian Chief Veterinary Officer  
OIE Delegate (Australia)  
Vice-President (OIE Assembly)

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## WA NOTIFICATION: BOVINE ASTROVIRUS - NEUROLOGICAL PRESENTATION

WA would like to advise of a detection by the Department of Primary Industries and Regional Development laboratory and AAHL of bovine astrovirus in CNS tissue (brain) using Next Gen Sequencing.

The virus shares 92% nucleic acid sequence similarity to the recently described astrovirus ([BoAstV]-CH13) associated with neurological disease in cattle in Switzerland (Bouzalas et al., 2016).

This case involved a single 2 year old angus from a mob of approximately 100. The producer contacted a private veterinarian due to presumed dystocia, with the presenting clinical signs including hind limb paresis and unusual stance. The cow was induced to calve, however subsequently deteriorated and was euthanased.

Histological examination of the brain revealed perivascular cuffing and multifocal gliosis varying in degrees through the neuraxis with cerebral and cerebellar cortices spared. Diffuse similar perivascular infiltrates of variable intensity were seen in the meninges. There was mild perivascular cuffing and gliosis in cerebellar peduncles and multifocal gliosis in the molecular cell layer of the cerebellum.

TSE was excluded in accordance with the Australian and New Zealand Standard Diagnostic Protocols for Animal Diseases –Transmissible Spongiform Encephalopathies. Rabies and West Nile virus infection were also excluded as well as endemic causes of neurological diseases.

There were multiple pathological processes present, with severe endometritis and pulmonary thrombosis potentially contributing to the clinical presentation.

However, notifying of this detection given that a similar astrovirus to [BoAstV]-CH13 has also been reported in cases of bovine neurological disease in other countries, Germany (2016). A different astrovirus was the putative cause of neurological disease in cattle in the USA (2013) and two cases in Canada (2017). Researchers in Switzerland retrospectively tested their bovine non-suppurative encephalitis cases for which they had histology blocks and detected viral genetic material matching [BoAstV]-CH13 in 33 of 97 cases.



WA working with AAHL to further characterise the virus and will include astrovirus as a differential in any indicative cases and will advise should there be any further detections.

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## NECROTIZING FASCIITIS (FLESH EATING SYNDROME) IN GREYHOUNDS

Confirmed cases of necrotising fasciitis has occurred in racing greyhounds from Darwin in October / November 2017. This is a rare but often fatal disease caused by *Streptococcus canis* bacteria with the last known occurrence in the NT in 1995. Death can occur within 12 hours of initial symptoms and assertive treatment must begin immediately to be successful. People are generally not at risk from this *Streptococcus* Type G bacteria, however good personal hygiene should be maintained and immune-compromised people should take further precautions against known infections.

Dogs that are suffering from necrotizing fasciitis will generally experience intense pain in the affected part as the first and possibly only symptom. This presentation can be misdiagnosed as snake or spider bite. Cats may also be affected. There are no records in other dog breeds or cats in the NT.

Further information in a fact sheet summary is at the NT Veterinary Board site: <https://dpiir.nt.gov.au/primary-industry/committees-and-boards/veterinary-board-of-the-NT/information-for-veterinarians>

Berrimah Veterinary Laboratory is keen to access more case material (post mortems). The contact number is 08 8999 2249.

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## DEBUNKING MYTHS AROUND SARCOPTES SCABEI VAR CANIS AS A ZOOZOSIS

*“My arms were all bitten by the mites after 5 hours of the puppy lying on me, it benefits the health of the children if the dogs don’t have skin conditions.”* – Quote from Remote Area Health Nurse, 26 September 2017

It has long been a misconception that the canine scabies mite, *Sarcoptes scabiei* var *canis*, does not cause issues to the human skin.

On the contrary, Indigenous people are well aware that healthy dogs means healthy communities.

So why the need for debunking?

It all started with the conclusion drawn by Walton et al (1999):

*Because of the apparent genetic separation between human scabies and dog scabies, control programs for human scabies in endemic areas do not require resources directed against zoonotic infection from dogs.* This was reinforced again by Walton et al (2004).

This is incorrect, as re- analysis of the data using more appropriate methods showed that spill-over dog- to- human transmission occurred multiple times and was an

important component of scabies control programmes (Morrison, 2005; Smout et al, 2017).

Dog- derived scabies mites have been experimentally shown to burrow, lay eggs and defecate in human skin initiating papular lesions (Estes, Kummel, & Arlian, 1983). As a result, in humans, an allergic reaction with vesicles, extreme pruritus and pustules can occur. This is called Transient Scabies and can last for hours or several days after each exposure.

In humans the pruritus caused by canine *Sarcoptes scabiei* is the issue. It is important because the resultant trauma to the skin can lead to subsequent bacterial infection. In some Aboriginal communities, scabies has been shown to underlie up to 70% of streptococcal pyoderma (Currie & Carapetis, 2000).

Continual exposure to mangy dogs- by contact, from bedding, etc - can cause repeated strep infections with long term outcomes. *Streptococcus pyogenes* Group A is the main causative agent for Rheumatic heart disease and Post streptococcal acute glomerulonephritis (autoimmune kidney disease) which are major health issues in Territory communities.

Scabies is a debilitating skin condition in Aboriginal communities. The continuing health disparities seen between Indigenous and non-Indigenous Australians are often related to socioeconomic factors and the harsh living conditions experienced within rural and remote Indigenous communities.

The health issues attributed to *Sarcoptes scabiei* var *canis* are easily resolved. Treatment is simple. A few doses of ivermectin as seen in these photos, skins are near normal. New products are now available with a longer lasting effect.

Really a good justification for dog health programs in remote communities!

Some common differential diagnoses in dogs: Lice/Fleas/Ticks, Demodex mites, seasonal allergies, atopy, food allergies, contact dermatitis, *Mallassezia*, ringworm, acral lick dermatitis, folliculitis, and granulomas.

EAD differentials would include (although both considered exotic):

- Cutaneous Leishmaniasis (see attached - currently only found in macropods in Aust. but a vector is here so worth mentioning)
- Screw-worm fly
  - Old world screw-worm fly (OWS) – *Chrysomya bezziana*
  - New world screw-worm fly (NWS) – *Cochliomyia hominivorax*.

Check out the AMRRIC Fact Sheet:

[http://www.amrric.org/sites/default/files/Zoonoses%20Factsheet%20Scabies\\_0.pdf](http://www.amrric.org/sites/default/files/Zoonoses%20Factsheet%20Scabies_0.pdf)

[The same 3 dogs before and after a few fortnightly doses of Ivermectin.](#)





Jan Allen

AMRRIC.

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## **NDSIP FUNDING**

A reminder that there is NDSIP funding available to provide private veterinarians performing disease investigations. We are trying to target mixed practice/urban vets this financial year. Amount of \$250 for eligible cases.

### **Information for veterinarians**

**Cases of disease in livestock may be eligible to receive an exemption from laboratory fees and a \$250 subsidy**

### **What is the NSDI Program?**

The National Significant Disease Investigation (NSDI) program, funded by Australian livestock industries and government, aids investigation of significant disease events by private vets who might be limited by competing priorities and commercial realities.

**What support is available?**

- Subsidies** of up to \$250 per case
- Support and case advice** from vet pathologists and government vets
- Exemption from lab fees** for samples submitted to the Berrimah Veterinary Laboratories (BVL)

**Is my case eligible?**

All registered vets can participate in the program.

To be eligible, the case must be a significant disease event affecting livestock.

Examples of eligible cases include;

- Sudden death or respiratory disease in a large number of pet chickens
- Neurological disease in horses
- Sickness or sudden death in multiple goats, sheep, cattle or horses
  - o Any unusual syndrome in any species.

Vets are encouraged to apply for the subsidy when investigating livestock disease on small farms and rural blocks, especially where there are multiple animals at risk.

**What do I have to do?**

1. Contact the NSDI coordinator to determine if the case is eligible.
2. Conduct the investigation, which may include a visit to the property, clinical evaluation, necropsy and submission of samples to the BVL.
3. Provide diagnostic feedback to the livestock owner and ensure they have a Property Identification Code for their property.
4. Submit required financial claim forms to the NSDI coordinator.

**Contact** NSDI program coordinator – Elizabeth Stedman – 8999 2035 – Elizabeth.stedman@nt.gov.au **For more information contact your regional Livestock Biosecurity Office** Darwin 8999 2035 Katherine 8973 9716 Tennant Creek 8962 4458 Alice Springs 8951 8181.

In addition to the NDSIP funding for larger pastoral/cattle disease investigations will be available under the NSDIP project for the next 2 years up to \$2,000 per investigation. More details on this as it comes to hand. Please let Elizabeth Stedman know if you identify any eligible cases in the meantime. Contact details are: ([elizabeth.stedman@nt.gov.au](mailto:elizabeth.stedman@nt.gov.au) phone 8999 2035.

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**E-LEARNING COURSE**

**Veterinarians, hobby farmers and backyard livestock** is a new e-learning course as part of a national initiative between the NSW Department of Primary Industries, Animal Health Australia and the Australian Veterinary Association.



It is a two-hour online course that provides veterinarians with the confidence and resources to build their business and improve engagement with hobby farmers, smallholders and clients with backyard livestock. The course will help veterinarians improve biosecurity outcomes with smallholders, resulting in early detection of disease. **This free course is relevant to all veterinarians nationally and will earn 2 CPD or VETED points.**

To register for this free course, or for more information visit: <http://www.dpi.nsw.gov.au/biosecurity/greater-sydney-peri-urban>



## EQUINE DISEASE SURVEILLANCE FOR VETERINARIANS

### ARE VETERINARIANS BEING EXPOSED TO EMERGING ZONOTIC DISEASES?

Zoonotic diseases have been increasing in significance in recent years, with 75% of all emerging infectious diseases being zoonotic. Veterinarians are at much high risk of zoonotic diseases that other professions because of their close contact with diseases.

### BACKGROUND

A study is being conducted to investigate the past exposure to known and emerging zoonotic pathogens in veterinarians. These include some bat borne viruses' and those



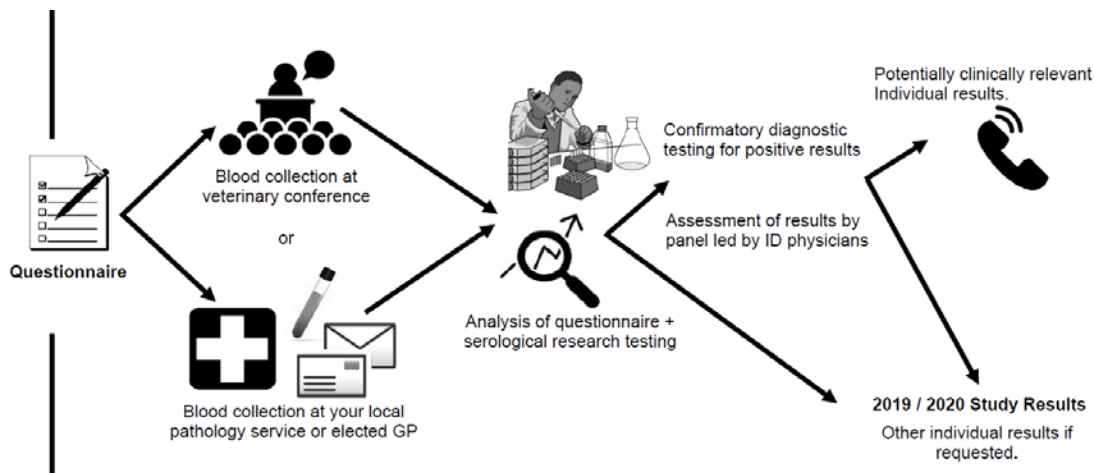
that utilise vectors such as mosquitoes and ticks as well as potentially zoonotic bacterial pathogens such as *Chlamydia psittaci* (human psittacosis) and *Coxiella burnetti* (Q fever). Recently, these pathogens have presented in novel forms such as Australian bat lyssavirus in two horses in 2013 or the case in 2014 where *C. psittaci* associated with an equine abortion demonstrated suspected zoonotic transmission. Could veterinarians on the frontline treating animals have been exposed to other potential zoonosis?

## AIM

To determine levels of exposure to a range of known and emerging zoonotic pathogens in veterinarians and to identify risk factors associated with seropositivity of these pathogens.

## PARTICIPATION IN THE STUDY

Your participation involves completing a questionnaire (online or paper form, duration approximately 15 minutes) and providing a blood sample for serological testing.



## What is the study about?

Zoonotic diseases have been increasing in significance in recent years, with 75% of all emerging infectious diseases being zoonotic. Veterinarians and other animal handlers are at much higher risk of zoonotic diseases than other professions because of their close contact with diseased animals. **The project aims to determine levels of past exposure to a range of known and emerging zoonotic viral and bacterial pathogens in veterinarians and horse carers and where possible to identify potential risk factors associated with seropositivity of these pathogens.**

Examples of pathogens that will be screened for are members of the following viral families and genera: Flaviviruses, Lyssaviruses, Henipaviruses, Rubulaviruses, Orbiviruses, Filoviruses, Hepaciviruses, Alphaviruses, Bunyaviruses, Bornaviruses, oronaviruses. In addition screening will be performed for some known bacterial zoonotic pathogens such as: *Chlamydia psittaci*, *Coxiella burnetti*, *Leptospira* and *Brucella*. This study will screen your blood using a Luminex research method. All research test results will be considered by our team of researchers which include specialist infectious disease physicians with public health consultation where required.



Positive results will require follow up testing with agent specific diagnostic assays (confirmatory testing) to determine their significance.

### **Who is carrying out the study?**

We are a team of veterinarians, epidemiologists, specialist human infectious diseases physicians and laboratory scientists with expertise in infectious disease serology from The University of Sydney Marie Bashir Institute for Infectious Diseases and Biosecurity, The University of Melbourne, and CSIRO Australian Animal Health laboratory (AAHL). This study will contribute to the PhD project of Ed Annand supervised by Navneet Dhand and Cheryl Jones. It will also contribute to the course requirements for DVM student Anna Gonzalez.

### **What does the study involve?**

The study involves completing a questionnaire and providing a blood sample (approximately 20ml) collected by a qualified phlebotomist at a veterinary conference or via your local health care provider. The questionnaire will ask details regarding your contact with animals, certain environments and your health history.

### **(4) How much time will the study take?**

The questionnaire will take approximately 15 minutes to complete and may be done online or in paper format, at the veterinary conference or elsewhere via email link or postage. Your blood collection will take between 10 and 15 minutes and of course you may schedule your blood collection for a time that suits you best either during the available times at the conference or at your local health care provider (we can send the sample materials and instructions).

### **(5) Can I withdraw from the study?**

Yes. Being in this study is completely voluntary and you are not under any obligation to consent to partake in the questionnaire or provide a blood sample. You may withdraw from the study any time by notifying the research team by sending an email to Navneet Dhand ([navneet.dhand@sydney.com.au](mailto:navneet.dhand@sydney.com.au) or 02 9351 1669) or Ed Annand ([ed.annad@sydney.edu.au](mailto:ed.annad@sydney.edu.au) or 0439 572 329).

### **(6) Will I receive my individual results?**

If your tests and questionnaire responses suggest you may have had an infectious disease exposure of possible clinical significance, you will be informed of the result and how best to proceed in consultation with public health authorities in your location of residence.

In addition you may elect via the questionnaire whether or not you wish to receive your individual results Investigation of risk for emerging zoonotic diseases among veterinarians and horse carers along with an interpretation from our panel led by specialist infectious disease physicians at the conclusion of the study (2020). This result could be that the testing was negative to all agents tested, that a positive result(s) was found but is of unknown biological significance, or that a positive result(s)

was found and not considered of on-going clinical significance. At the conclusion of the study (2020) we will inform all participants of a summary of the findings with study population (anonymised) rather than individual results.

### **(7) What will happen to information about me that is collected during the study and will anyone else know the results?**

All aspects of the study, including results will be stored securely, your identity/information will be strictly confidential and only the researchers will have access to information on participants. The research group may expand to include further scientists, infectious disease physicians or veterinarians with specific expertise in certain pathogens that may be detected throughout the study. A report of the study may be submitted for publication. Every effort will be made to maintain the anonymity of all participants – only summary results will be presented and published. **If your tests and questionnaire responses suggest you may have had an infectious disease exposure of possible clinical significance, public health authorities in your location of residence, and where appropriate and with your consent, your GP will be notified in order to facilitate appropriate health care, advice and any further testing.**

You have the option to consent for retention of your blood sample and information for use in potential future research projects performed by members of this research team that focus on emerging infectious diseases (Please refer to the additional tick box found as part of the consent form or consent section of the online questionnaire). We do not yet know the details of what these studies might be. We will seek human ethics approval before using the information in these future projects.

### **(8) Will the study benefit me?**

Veterinarians are known to be at much higher risks of zoonotic diseases compared with other professions, due to their close contact with animals. Your involvement in this study will enable a detailed examination of the current situation and the level of exposure to zoonotic disease in the Australian veterinary profession. **This will enable development of methods to reduce the zoonotic disease exposure risk for the veterinary profession and to reduce the occupational health and safety risks faced by the veterinary profession.** If your tests and questionnaire responses suggest you may have had an infectious diseases exposure of possible clinical significance you may realise direct health benefit as a result of this study.

### **(9) Are there any risks or costs associated with being in the study?**

There are no direct financial costs to participants of this study. It is possible that as a participant of this study you may incur distress as a result of inconclusive or positive test results. In such instances we encourage you to seek veterinary specific and non-veterinary counselling such as are made available via the AVA wellness pathway, mental health support and counselling resources (<http://www.ava.com.au/VetHealth>)

### **(10) Can I tell other people about the study?**



Yes. We are endeavouring to sample a wide cross-section of the veterinary profession, so please tell your colleagues attending the conference about the study and we encourage them to participate. We are particularly interested in veterinarians and horse carers (owners, trainers and veterinary support staff) that have been involved in cases of equine Hendra virus-like illnesses and or equine reproductive and neonatal practices.

### (11) What if I require further information?

If you read this information at a veterinary conference that our team is attending, one of our research team will discuss it with you further and answer any questions you may have. If you would like to know more at any stage, please feel free to contact Ed Annand on 0439572329, or email [ed.annand@sydney.edu.au](mailto:ed.annand@sydney.edu.au) or Navneet Dhand on 02 9351 1669/ 0434 180 301, or email [navneet.dhand@sydney.edu.au](mailto:navneet.dhand@sydney.edu.au).

### (12) What if I have a complaint or concerns about the study?

Research involving humans in Australia is reviewed by an independent group of people called a Human Research Ethics Committee (HREC). The ethical aspects of this study have been approved by the HREC of the University of Sydney 2017/339. As part of this process, we have agreed to carry out the study according to the *National Statement on Ethical Conduct in Human Research (2007)*. This statement has been developed to protect people who agree to take part in research studies. If you are concerned about the way this study is being conducted or you wish to make a complaint to someone independent from the study, please contact the University using the details outlined below. Please quote the study title and protocol number.

The Manager, Ethics Administration, University of Sydney: **Telephone:** +61 2 8627 8176; **Email:** [human.ethics@sydney.edu.au](mailto:human.ethics@sydney.edu.au); **Fax:** +61 2 8627 8177 (Facsimile)

### HOW DO I PARTICIPATE

Send an email through to [ed.annard@sydney.edu.au](mailto:ed.annard@sydney.edu.au) to express your interest in participating in this study.

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## MID AND LATE CAREER VETERINARIAN RESILIENCE STUDY

[University of Adelaide Research Study](#)

Dear Veterinarian,

We wish to invite you to participate in a research project regarding the experiences of mid and late career veterinarians (5+ years post-graduation). The study specifically focuses on professional motivation, resilience and efficacy of veterinarians. Your participation will contribute to helping better understand how mid and late career veterinarians enjoy a successful and rewarding career. We hope that by better understanding your experiences, we can help to inform veterinary education and the wider profession about ways to support professionals in an engaging and rewarding

career.

Participation will involve completion of a brief online survey which should take approximately 15 minutes of your time. Your participation is voluntary and anonymous and all data collected will be strictly confidential. At the end of the survey you will be invited to participate in a follow-up interview study aimed at exploring resilience in detail in mid and late career veterinarians. You can also elect to go into the draw to **win one of five \$20** direct debit cards.

You will find a more detailed information sheet available when you

**click on the link** below.

<https://www.surveymonkey.com/r/Resilientvet2017>

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## ANTIMICROBIAL STEWARDSHIP RESOURCES FOR VETERINARIANS

Antimicrobial resistance is a major global threat of increasing concern to human and animal health. It is estimated that it will be the leading cause of human deaths by 2050 and has implications for both food safety and food security and the economic wellbeing of millions of farming households. Antimicrobial resistance can be spread directly, or indirectly, through food or the environment.

Veterinarians and human health professionals play a very important role in fighting antimicrobial resistance at every opportunity. In June 2015, the Commonwealth of Australia released the National Antimicrobial Resistance Strategy 2015-19 aimed at addressing the issues of antimicrobial resistance in Australia. One of the objectives was to *implement effective antimicrobial stewardship practices across human and animal care settings, to ensure the appropriate and judicious prescribing, dispensing and administering of antimicrobials.*

To help the veterinary profession continue to improve antibiotic prescribing practices and demonstrate responsible stewardship of antimicrobial drugs, a number of resources have been developed. This includes:

- [AIDAP Antibiotic prescribing guidelines for dogs and cats](#)
- [AIDAP Infection Control Guidelines](#)
- [Veterinary use of antibiotics critical to human health](#) - fact sheet, April 2017
- [Agriculture Victoria](#) - resources, September 2017
- Resources on Australian Veterinary Association Antimicrobial Resistance webpage <http://www.ava.com.au/amr>

Resources available from 2018:

- **Online educational course for effective antimicrobial stewardship for veterinarians.**  
The Veterinary Schools of Australia and New Zealand have partnered with the Department of Agriculture and Water Resources to develop this online course



and will be available to all veterinarians in June 2018 on several continuing education websites, and you will earn CPD points on completion.

- **Antimicrobial Prescribing Guidelines for livestock including pigs, poultry, sheep, cattle and horses** are being developed by the Australian Veterinary Association in partnership with Animal Medicines Australia. These will be available from 2018 onwards.

Author: Sarah Britton, NSW Department Primary Industries, Project Manager for VSANZ and AVA/AMA projects

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## **VETERINARY BOARD ELECTIONS IN 2018**

Nominations for the election of 2 veterinarians to the Veterinary Board is due next year. Nomination forms will be sent out in February 2018. Please consider nominating for representation on the Board.

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## **VETERINARY BOARD OFFICE CLOSURE OVER XMAS**

The Veterinary Board office will be closed from Thursday 21 December and reopen on Monday 5 January 2018.