



# National Biosecurity Strategy – consultation draft

Submission of the  
Australian Veterinary Association Ltd

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## The Australian Veterinary Association

The Australian Veterinary Association (AVA) is the national organisation representing veterinarians in Australia. Our 8,500 members come from all fields within the veterinary profession. Clinical practitioners work with companion animals, horses, livestock and wildlife. Government veterinarians work with our animal health, public health and quarantine systems while other members work in industry, research and teaching. Veterinary students are also members of the Association.

## National Biosecurity Strategy – consultation draft

The AVA thanks the National Biosecurity Committee and Australian Government for the opportunity to comment on the consultation draft of the National Biosecurity Strategy (the Strategy).

### Summary

The Strategy is a very high-level document at this stage, essentially a ‘blueprint’ for future direction, and we look forward to being consulted during the development of future specific action and implementation plans. In principle, the AVA supports the scope, vision and purpose of the Strategy, including the 6 priority areas identified for attention.

Roles within the biosecurity system have been identified only generically throughout the Strategy. The strategy lacks detail on the relationships between the Australian government and the states/territories, and the relative roles and responsibilities of each. Similarly, the Strategy does not provide detail about specific industries and professions. At this stage we are not reassured that the role and responsibilities of the veterinary profession in national biosecurity are captured within the Strategy as presented.

The Strategy could better identify and articulate the key components of disease control and management, namely quarantine, early diagnosis, response and eradication. Veterinarians play a vital role in all of these, and are on the front line of surveillance for emergency animal diseases which could cost the economy billions of dollars in an outbreak. However the veterinary profession is facing critical workforce shortages and other sustainability challenges. There is a pressing need for government investment and support to ensure an effective veterinary workforce is in place to support Australia’s favourable biosecurity status.

**We would like to take this opportunity to highlight issues which are pertinent to the specific role of the veterinary profession in the national biosecurity system, including relevant risks and opportunities which have implications for the 6 priority areas. We address each of the priority areas in turn.**

### 1. Shared Biosecurity Culture

The AVA strongly supports the Strategy’s aim to enhance collaboration and sharing of responsibilities, and improve awareness at all levels of society of the significance of biosecurity, given the increasing complexities and challenges we face as a nation. In Australian agriculture, our ‘clean and green’ reputation has provided a privileged trading position for many years, ensuring consumer confidence in terrestrial and aquatic livestock production in both local and international markets. This reputation is reliant on a sound animal disease biosecurity, surveillance and reporting system, and veterinarians play a crucial role in maintaining this.

We know that the impacts on our livestock and export industries would be catastrophic and cost the economy many billions of dollars, should diseases such as Foot and Mouth Disease, African Swine Fever or Lumpy Skin Disease gain entry to the country. In a time of heightened risk from both exotic and emerging diseases, as well as rapidly increasing global trade in animal products and human travel and resettlement, it is imperative that Australia’s governments appropriately resource any gaps that are identified as a result of this review. The AVA believes that adequately resourcing public-private partnerships between the government and private veterinary sectors, and development of a coordinated framework for disease surveillance, prevention and control, is key to success of this shared approach.



## 2. Stronger Partnerships

Over the past 20 years there has been a rationalisation of government veterinary service roles in many Australian jurisdictions. This has reduced surveillance and laboratory testing of suspect animal disease events in rural and regional Australia. This withdrawal of government services has not been met by an equivalent advancement of private services, leaving a gap in surveillance capacity. There are a range of reasons for this: economic sustainability of rural veterinary practice remains a challenge, and there are critical veterinary workforce shortages. Mechanisms to support the rural veterinary sector into the future are essential if adequate animal disease prevention, surveillance and response is to be maintained.

Private veterinary practices could be much better utilised as a potential source of both active and passive surveillance data for diseases of terrestrial and aquatic livestock, wildlife and companion animals. Though some government supported schemes do exist to engage private veterinarians in disease surveillance<sup>1</sup>, these are relatively limited and under-utilised, and there is considerable scope to improve their uptake as well as to develop further models.

The World Organisation for Animal Health (OIE) *Performance of Veterinary Services* evaluation in Australia in 2015 noted that private veterinarians are a vital link in biosecurity and emergency response plans. However, there is no formal or enforceable agreement to ensure their participation in an emergency animal disease (EAD) outbreak, and this is viewed as a potential weak link in the nation's biosecurity capabilities. In 2014 the AVA assisted in the development of national standards for the employment of private veterinarians in an EAD. These address payment of veterinarians, though do not address the issue of ensuring their participation. Models should be developed to address this deficiency; it is suggested that recruitment on a whole-of-practice basis may result in better and more coordinated efforts, and an ensured supply of veterinarians and support staff, with less disruption to private practices, than individual recruitment of private veterinarians by the government. Protocols for delivery of delegated functions and duties, as well as training and preparedness, should be part of any such model.

## 3. Highly Skilled Workforce

The veterinary profession is currently facing unprecedented workforce attrition and a critical workforce shortage. Response and eradication capacity in any major EAD is going to rely on participation of the private veterinary sector, however it is likely that the current veterinary workforce will not have the capacity to undertake the work necessary. We see this as a current critical risk to the nation's biosecurity system.

Veterinary shortages have long been an issue in rural and remote areas of Australia, and this has extended to include veterinarians in urban practice as well. Workforce attrition is occurring at an unprecedented rate, leading to a critical shortage of veterinary practitioners, unable to keep pace with the demand, and unable to service the needs of the community. This poses a risk to Australia's way of life, biosecurity, and economy.

Drift from rural practices and food production animal medicine has seen a parallel rise in lay operator intrusion, with an intrinsic lowering of standards of biosecurity surveillance. With the ever-increasing demands for professional services to the rural sector, failure by the veterinary profession to supply services due to lack of staff has seen less-skilled technicians and lay operators fulfilling these roles, posing an overall risk to the food animal sector's integrity and continuity.

Solutions to support the veterinary profession are urgently needed. Government support is needed in the form of rural practice incentives, and expansion of existing public-private surveillance initiatives<sup>1</sup> to keep veterinary practice financially viable in rural locations. HECS 'forgiveness' opportunities for veterinary graduates should be explored. The new job-ready graduate funding model will not help us to recruit more applicants for veterinary science (an undergraduate student now only has access to 7 years of government funding). There needs to be some consideration for professional degrees such as veterinary science.

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<sup>1</sup> Eg Transmissible Spongiform Encephalopathies (TSE) Freedom Assurance program; National Significant Disease Investigation Program (NSDIP)



There will be additional future challenges facing the veterinary profession from increased ambient temperatures, more frequent droughts, and other natural disasters such as fires. There is a need for a strong, appropriately trained workforce to service the animal production industries as these are challenged by more variable feed availability, changing disease incidence and distribution, and other effects of climate change. If there is a critical shortage of skilled veterinarians, this will place pressure on existing veterinary practices in the form of increased workloads, with the risk of further workforce attrition as a result.

#### 4. Coordinated Preparedness and Response

The Strategy could benefit from stronger attention to response arrangements; while acknowledging response is predominantly the role states and territories, the Australian government can play a significant role in coordinating and funding response agreements with the private sector.

The continuing threat of current and emerging diseases requires a coordinated national One Health approach to Australia's health security, disease surveillance and effective national preparedness and response. Within this, strengthening of animal health systems for livestock, wildlife and companion animals is critical due to the zoonotic origin of many emerging infectious diseases. Japanese Encephalitis is just one example of this.

Development of a framework or agency whose responsibility is disease prevention and control based on a One Health approach would ensure disease prevention, preparedness, response and wellbeing in humans, animals, and plants in their shared environment. This would provide cost effective management of communicable and non-communicable diseases as well as other problems with local, regional and global impact such as antimicrobial resistance (AMR) and food security.

The AVA supports the training activities funded by the government to date, including state-delivered continuing education for veterinarians in emergency animal disease recognition, and real-time training in Foot and Mouth Disease in Nepal, and recommends increased government support for these types of initiatives. These should be expanded and prioritised, including attention to ways to incentivise practitioner involvement. Successful participation in an EAD response demands a sound understanding of the AIIMS structure and systems, and while government veterinarians are well versed in these, private practitioners generally are not. Incentivising private practitioner participation by subsidising their time away from the practice to attend this training is recommended, and there should be consideration given to reinstating an Australian Veterinary Reserve or equivalent.

Giving the increasing threat of climate change, there is a need for more veterinarians highly skilled in monitoring and detection of pathogens and diseases, including zoonotic agents and diseases, as animal and human populations interact. The magnitude of such challenges is evident from recent experiences with pathogens such as influenza viruses, henipaviruses, lyssaviruses and coronaviruses.

#### 5. Sustainable Investment

In addition to the funding priorities identified above, two further areas of critical need are:

##### *Companion animal disease surveillance*

For companion animals in Australia, disease surveillance has historically only taken the form of *ad hoc* surveys, or has focussed on adverse reactions to pharmaceuticals, and no formal companion animal disease surveillance activities are currently undertaken by government. Australia's only national Australian companion animal multi-disease surveillance system was introduced by a pharmaceutical company in 2010. It operated for 7 years before being closed through lack of resourcing; over 26,000 cases of disease reports were collected during this time.

An historic lack of surveillance does not reflect a lack of need and it is estimated that tens of thousands of pet animals currently succumb to preventable disease every year in Australia, many fatally. In the event of a highly infectious disease outbreak affecting companion animals Australia is placed at significant risk due to the lack of formal surveillance or response framework. For example, the (formerly) exotic disease *Ehrlichia canis* was recently introduced, and was not detected until it was quite widespread.



Current advances in technology offer the potential for new surveillance systems for companion animals, such as VetCompass, which can analyse data from companion animal veterinary practices Australia-wide. Such systems are being developed by universities and not-for-profit animal welfare organisations, but with very limited funding, and are dependent on grants, donations, and self-generated funds. Government investment is needed to enhance this type of capability.

#### *Wildlife disease surveillance*

Disease surveillance in Australian wildlife is coordinated by Wildlife Health Australia (WHA), who work collaboratively with a range of government, non-government, private veterinary services and lay wildlife groups. Seventy-five percent of emerging infectious diseases are zoonotic, with recent serious examples arising from wildlife (eg Hendra virus, Japanese Encephalitis) so wildlife disease surveillance will only become more important in the face of climate change, land clearing and ongoing human encroachment on wildlife habitat. The AVA welcomes the recent announcement by the government for improved funding of WHA to undertake this important activity.

Climate change is a major factor in the changing epidemiology of vector-borne diseases that affect human and animal health and in the spread of these diseases from equatorial regions. Increased regional sea and land temperatures and rain events that facilitate vector reproduction have resulted in an increased incidence of such diseases and/or in shifting geographical ranges, as well as increasing the risk from zoonotic diseases. Sustained government investment in wildlife disease surveillance will be required to adapt and improve our collective readiness to respond to significant biosecurity threats.

## 6. Integration Supported by Technology, Research and Data

### *Diagnostics*

Governments must ensure that veterinary laboratory capacity meets Australia's needs, including those of regional and remote locations. This may include evaluating options to increase private veterinary laboratory involvement in reference laboratory support, to supplement the government laboratory system. There is also a need for priority training of laboratory personnel, including veterinary pathologists, microbiologists and toxicologists. Our laboratories currently have a shortage of high-level scientific staff. This is essential to maintain Australia's favourable animal health status.

A nationally harmonised process for sample submission and testing for notifiable, exotic or emergency animal disease exclusion should be established. This will reduce variation among jurisdictions and improve ease of use for veterinarians. Better systems for sample transportation to the laboratories should be a priority, as well as improved turnaround times. This also has public health and welfare implications: for example, no diagnostic laboratory in North QLD means that a Hendra test can take 3-4 days. It is recommended that these issues become part of any review of the AUSVETPLAN Laboratory Preparedness Manual.

### *Data*

Disease surveillance would be enhanced by developing systems that provide timely, de-identified, regional syndromic data of sufficient quality to meet identified needs of both government and practices. Standardising reporting systems across state borders to enable aggregation of data will maximise the reliability, accuracy and useability of surveillance data.

Traceability: the early actions after a disease is diagnosed are critical. Currently most EAD responses involve a livestock standstill and tracing using antiquated paper-based measures. The AVA recommends that:

- the NLIS used for cattle and sheep in some states should be applied uniformly across the country and there should be clear identification and electronic recording of all other livestock species;
- the current paper-based vendor declarations are phased out and ENVDs be mandatory, so there is capacity to trace all movements electronically; and
- the current system of purchaser responsibility for NLIS transfers be changed to make it the vendor's responsibility. This will immediately improve the speed of capacity to trace animals in an EAD.



## Research

Research and development of stall-side rapid diagnostics and other advances in early disease detection will be critical in future disease response and containment activities.

Climate change is a major factor in the changing epidemiology of vector-borne diseases that affect human and animal health and in the spread of these diseases from equatorial regions.

There is a need for active collaboration using a One Health approach to support research to:

- Reduce the negative effects of climate change on animal health and welfare, the environment and wildlife.
- Reduce the potential for spread of arboviruses, henipaviruses and other zoonotic disease agents as a consequence of climate change.
- Provide technical advice and public education regarding disease control programs.
- Mitigate the negative effects of a changing environment on sustainable terrestrial and aquatic animal production and nutrition; promote agricultural practices that produce less carbon and those that actively fix carbon long term in soils and vegetation,
- Reduce human contributions to climate change.

## Key Recommendations – Summary

- Increased government funding and expansion of public-private schemes such as the National Significant Disease Investigation Program (NSDIP), as well as development of additional models which seek to enhance collaboration between private and government veterinary services;
- Australia's veterinary workforce capacity should be regularly audited against the present and future risks to Australia's animal industries, and any deficits addressed. Government-supported schemes to enhance retention in the veterinary workforce, including rural practice incentives and HECS 'forgiveness' programs, should be investigated. A big-picture approach is needed to ensure that Australia has the right number of veterinarians, and to address the marked workforce attrition currently occurring in both rural and urban practice. This is essential to support Australia's favourable biosecurity status and prevent billions of dollars in losses to our domestic and export animal industries.
- Investment is required into emerging areas of surveillance importance, such as companion animal and wildlife diseases;
- Increased EAD continuing education for veterinarians including monitoring and detection of emerging diseases and EAD response arrangements;
- Prioritisation of veterinary laboratory capacity, including workforce skills, sample transportation, disease testing, rapid diagnostics and standardised reporting;
- Research into the changing epidemiology of vector-borne diseases and other impacts on biosecurity as a result of climate change;
- Development of an independent national One Health framework for disease prevention and control.

### Contact:

Dr Melanie Latter  
Australian Veterinary Association  
E: [melanie.latter@ava.com.au](mailto:melanie.latter@ava.com.au)