

Introduction

In the decades since the late 1960s there has been a decreasing role played by the Veterinary Profession in Post Border Biosecurity. Veterinary numbers in State administered Agricultural Departments have decreased to such an extent that there are now no Veterinary inspections of livestock on-farm unless requested by livestock owners. This was highlighted in the Nairn Review of 1996.

In previous decades the price of animals was high enough to justify on-farm visits for individual animals. The cost of veterinary transport and consulting fees makes this no longer economically viable for commercial livestock operations. State Departments of Agriculture have progressively decreased the numbers of field veterinarians conducting disease surveillance activities. Those veterinarians still employed are increasingly based in metropolitan cities and no longer residing in the regional areas according to a recent survey of government veterinarians in Western Australia.¹

Any qualified authority has not filled this deficit in animal monitoring for disease whether exotic or endemic since those days. Recent outbreaks of Anthrax in Victoria and footrot in Western Australia where diagnosis was made some time after initial cases ensured that subsequent attempts at eradication continue at much greater cost than if surveillance had picked up the problems earlier.

Successful control and eradication of the recent outbreak of Equine Influenza owes much to the role played by Consultative Committee for Exotic Animal Diseases and the expert advice given by that veterinary body. The CCEAD is the peak body giving scientific advice to the National Management Group responsible for the coordinated response to animal disease outbreaks.

The announcement of this review is timely and necessary to examine previous reviews and the implementation or lack of implementation of previous recommendations.

¹ Maxwell et al Rural Vet Services in WA AVJ vol 86 p 7-11

This submission concentrates on issues related to the post quarantine portion of the Quarantine Continuum proposed under the Nairn Report of the late 1990s.

Issues for Consideration

C1 Risk across the Quarantine and Biosecurity continuum

Present quarantine and Biosecurity arrangements require regular auditing of border security. This was recommendation 86 of the Nairn Report – “Quarantine Australia gives high priority to auditing and reviewing its border activities”. Evidence presented to the Callinan Enquiry seems to indicate that visits to pre-border and border quarantine stations internationally and within Australia have been neglected through lack of resources resulting in a dearth of information on compliance with Australia’s quarantine requirements. It will be useful for this review committee to read what Commissioner Callinan has to say in his report regarding this aspect of Biosecurity requirements.

C2 The Legislative framework

It is my belief that current legislation and administrations contain in their entirety all the powers necessary to implement an efficient, cost effective biosecurity system. The implementation of that system remains less than ideal, although present and past administrations should take a great deal of credit for the high standards already reached. I have no knowledge of plant quarantine so am unable to comment on plant quarantine systems. The fact that plant incursions are running at 10 times the rate of animal disease incursions according to Nairn makes me think more could be done.

C3 Jurisdictional and institutional arrangements

Some industries seem better organized than others in controlling disease and disease surveillance. Intensive farming enterprises like pig and poultry through their very nature of intensive management and strict quarantine controls on-farm, aids cost effective implementation of biosecurity. The diverse nature of broad acre farming makes cost effective disease surveillance difficult, if not impossible, under current economic circumstances.

The dearth of expertise in regional Australia is not helping. The Australian Veterinary Association for many years have been lobbying government at all levels to change public policy on the use of veterinary manpower. Veterinarians have been progressively removed from positions of power within State and Commonwealth Departments

of Agriculture and Primary Industry. This is not because veterinarians are not capable of performing complex administrative tasks or inappropriate advice. Most of the senior public servants that have veterinary degrees do a wonderful job in management and providing scientific advice.

It is worth quoting from the plenary address to the Australian Veterinary Conference 2006² by Professor R Whittington, Chair of Farm Animal health, Faculty of Veterinary Science, University of Sydney.

"There are significant economic benefits of veterinary engagement in food production. Australia has developed a unique status with respect to health and safety of product because of the activities of the veterinary profession. About 97% of Australia's beef exports are to Pacific Rim markets of Japan, Korea and USA.

In those markets we receive 20 to 30% more per kg than we do in any other market because of the perception that our product is safe, and free from hormones and chemical residues, and this is more important to these consumers than the price of the product, its taste and whether or not it is juicy.

The factors of safety and freedom from hormones and chemicals are the province of the veterinary profession, from the veterinary practitioner through to animal health, agricultural trade and veterinary chemical regulators.

The factors that ensure we have this valuable internationally renowned status begin on the farm and end up in the planning departments of animal health authorities around Australia. This involves field veterinarians, laboratory networks staffed by veterinary pathologists and laboratory scientists, veterinarians in the States and in Canberra compiling data about the distribution and incidence of disease, then planning and developing responses and holding simulation exercises.

This is a vast spectrum of veterinary science, but it is marketed inadequately to the community and therefore to politicians. Only 20% of this activity is visible. This has enabled a process of attrition and active withdrawal by government from provision of veterinary services on economic rationalist grounds, but clearly with minimal economic analysis. Veterinary services are analogous to an insurance policy and the premium has not been paid by Australia for some years."

² Global Veterinary Defense, R Whittington, AVJ Vol 84 No 8 pp265-269

It is incumbent on this review committee to state in unequivocal language that government must change their attitude to plant and animal quarantine and disease status surveillance (Post-Border Protection) on farms across Australia. Agricultural and Primary Industry Department planning departments have no idea what the disease status of agricultural areas because no one with expertise is looking for disease there. Nairn reported that no entomologist expert in sugarcane has visited the sugarcane areas of Queensland from 1989-1996³. When planning is being done with incorrect or no knowledge, all the expenditure on that process is wasted. It is not sufficient that disease surveillance only happens at the abattoir. With increasing percentages of animals being exported live, the parasite and subclinical disease status of the national herd and flock is more difficult to evaluate without expert knowledge from the farms themselves.

With the recent publicity of Avian Influenza and SARS there is increasing public awareness of zoonotic diseases and their potential for causing great human suffering. Dr Dianne Sheehan AVA President in her viewpoint column in AVJ⁴ has called for a Centre for Disease Control. Here the drawing together of all health professional disciplines with the common goal of combating disease embodies the one-medicine concept.

It may be that there needs to be a rethink on how best to co-ordinate quarantine and disease surveillance by government along the lines recommended in her column.

Whatever model is chosen for administration the result should include greater presence on farm of professional experts, capable of disease diagnosis in plant and animals or presence of exotic organisms of whatever phylum.

The previous discussion seems to lead to the proposal that legislation needs to be enacted to coordinate Commonwealth and State jurisdictions to provide a one-medicine concept for the surveillance and recording of human, plant and animal pathogens entering Australia.

³ Australian Quarantine- a shared responsibility Nairn et.al. 1996

⁴ AVJ Vol 86 No 3 March 2008 pN6

Pre Border auditing of countries overseas supplying plants animals and migrants need regular auditing and communication strategies to advise them of Australia's desires.

Thus we have aspects of numerous departments (Foreign Affairs, Primary Industry, AQIS, and Biosecurity Australia) under Commonwealth Government and some under State Government control (Health and Agriculture or DPIs). The Nairn Report recommended an independent authority along the lines recommended here. The difference is the involvement of Department of Health.

I would argue that there needs to be separation of Imports and Exports at department level but still within the ambit of the Centre for Disease Control. Thus Customs would form a division within the enlarged department.

I see no conflict with the regulator also playing a role as facilitator.

C4 Culture, efficiency and resourcing.

Resources are currently not deployed across the continuum to the areas of highest risk/return. According to transcripts from the Callinan Inquiry there is minimal investment in pre border surveillance and as argued above there are decreasing resources allocated to post border monitoring. The improvement in border protection is obvious to any passengers who have recently travelled though airports acting as gateways to overseas.

Given the above facts and following the issues paper questions we can then argue that border security has been increased and is delivering a service but I have no knowledge of its efficiency or cost effectiveness.

I have no knowledge of the requirements or auditing of pre border quarantine facilities but I believe that there is a need for these functions to be delivered.

In the report on rural veterinarians in Western Australia by John Maxwell⁵ it would appear that farmers make decisions based on economic considerations and if the cost of veterinary attention outweighs the benefits it will not be pursued, whether it is therapeutic or prophylactic. In fact 55% of rural practitioners reported that if the farmer could purchase drugs directly they would not seek veterinary

⁵ Maxwell JAL Rural veterinary services AVJ vol86 p 74-79

attention at all. Thus the idea of cost recovery for disease surveillance purposes is most unlikely to succeed on an individual farm basis. Some animal production industries would support a cost recovery scheme but others would find it more difficult to justify economically.

The recent Equine Influenza outbreak provides an actual example of the contrast between government operated and private operated quarantine stations situated respectively at Eastern Creek in NSW and Spotswood Victoria. It would appear that for certain species it is cost effective to allow private enterprise the responsibility for quarantine and disease surveillance duties "at the border". It should remain the realm of Government to audit privately operated stations at suitable intervals.

The veterinary profession has perfectly adequate skills to deliver optimal quarantine and biosecurity systems. The problem for the national interest has been that for the past three decades those skills have been progressively shunted aside and discounted by succeeding administrations at Commonwealth and State levels. Veterinarians are very poor at marketing or pushing at a political level the skills they can bring to the table. Administrations ignore them at their peril as recent exotic disease outbreaks testify.

The EI outbreak costs of \$500 million+ would have paid for years of regional veterinary services. As it was costs blew out because there was no expertise in sufficient quantity in initial stages to contain the spread. The fact that once organized the veterinary profession cleaned it up in less than six months should send a strong message to government of the strength of the resource they have been ignoring.

There is a lack of infrastructure to properly contain or diagnose disease in rural Australia. Opening the Animal Health Laboratory in Geelong has not compensated for the closure of regional veterinary laboratories across the nation. Animal diseases need regional laboratories in every State for timely and accurate testing and diagnostic services. New technologies make the testing of blood and other body fluids more cost effective so greater efficiencies of flock and herd testing are achievable

It is intriguing to contemplate that the demise of veterinary services to regional areas has paralleled the gradual demise of regional townships and the dearth of other professional services being supplied to regional communities. The shortage is most acute in the mining and pastoral regions of Western Australia where State Government policy has been to condone the mining policy of "Fly in -fly out". An anecdotal report of

what happened in Tom Price when Marangaroo mine site changed from full time employees to fly-in, fly-out personnel management would illustrate the problem.

In 2005-6 there was a full time veterinary service supplied to Tom Price and Parabardoo a town 80 kilometers away by the wife of a Marangaroo geologist. Disease surveillance by a qualified expert was being supplied free of charge to the government by private enterprise. When the change occurred to personnel management the veterinarian moved to Perth where there is an oversupply of veterinarians and Tom Price lost its vet service. Full time residents of Tom Price are now only served by a weekly one-day service from Newman (368kms away) or Exmouth by aeroplane. This is a costlier service than before and the service quality is less comprehensive. While I am unaware of other professions I could imagine that spouses of other miners would have professions that could supply services to the towns that this spouse did in veterinary science. The social impact on regional centres would be dramatic. Infrastructure costs to governments would decrease, quality of life for mining town residents would be enriched by having intelligent professionals interacting with each other and promoting community social activities more complex than existing.

This story in microcosm illustrates the unforeseen consequences of how a change in personnel management in one industry can decimate a mining town. Tom Price is now a town in decline where before it was a thriving community entering its third generation population where the grandchildren of original miners are being schooled. It would not be just post-border surveillance that would benefit from governments of all persuasions adopting a nation building attitude rather than centralizing all services in metropolitan areas where service providers cannot cope with the load.

Another factor in this demise has been provision of "fee for service" by Departments of Agriculture. Conversations with farmers through the South West of Western Australia universally produce the response that veterinary professional services are too expensive for routine visits. In past decades Agricultural vets did routine visits to all farms and kept very good records of disease episodes. The cost of this service, as a portion of the price an outbreak of a highly infectious disease, is miniscule. It could be thought of as a business insurance premium, as Professor Whittington stated in his talk sited above.

Given the above scenarios a solution that would help develop rural Australia, decrease the pressure on metropolitan roads, and develop a

post border disease surveillance programme that would supply accurate disease incidence statistics, would be to return to the State Departments of mid-twentieth century where stock and agricultural inspectors and veterinarians were re-introduced back onto farms identifying weeds, post morteming dead stock and reporting back to head office on a regular basis. The costs for these services need to be publicly funded.

C5 Communication and consultation

I am insufficiently informed to contribute to this aspect of the review.

C6 Research

There are now six Universities training hundreds of veterinary students each year in Australia. In recent years the selection criteria based on TEE or high school graduation scores has required veterinary students to demonstrate higher qualifications than any other profession including medicine, law or dentistry before being allowed to enter a veterinary school.

Thus the quality of intelligence and problem solving abilities required of veterinarians is potentially greater than any other skill in the nation. There are more veterinarians than ever in the nations history and they cost more per head to train than any other profession including medicine. The lack of utilization of this skill set by the nation should be considered a national disgrace.

Recent publicity surrounding the \$2.4 billion cut back to CSIRO funding seems to indicate the lack of priority being given to primary research continues recent governments' priorities. Simon Marginson in an essay recently published states "At the federal level, education, training, and publicly funded research have been marginalized from mainstream economic and nation-building policy since the reforms of the early 1990s. The States and territories have not had the fiscal capacity to compensate for federal neglect."⁶ Biosecurity and biological research is merely one more area in which Australia is falling further behind the rest of the world as a result of national focus remaining entirely in economic rationalism. The current 2020 summit in Canberra may, hopefully, generate a movement away from this attitude and lead to a

⁶ Marginson Simon, Universities Essay in "Dear Mister Rudd" Robert Manne Editor P266

more complex society where money and materialism will fit in a less dominating position.

C7 Review

It has been part of Commissioner Callinan's inquiry to review this aspect of biosecurity from an equine point of view. With the increasing use of importing semen and DNA in microscopic frozen forms the need for quarantine stations off or on shore may be decreasing. This does not mean the existing stations should not be audited in a timely and comprehensive fashion so Australia's and importing nations overseas can maintain their confidence in the quarantine standards in place in Australia.

Conclusion

Australia rightly remains proud of her history in the fields of quarantine administration and biosecurity especially in the field of animal diseases. Recent events should not be used to dismantle existing infrastructure. It is appropriate that regular reviews are made and more efficient methods implemented as they emerge internationally. My plea remains for Australia to return to the days where information flowed to centrally located administrators where decisions could be made based on real statistically reliable data. This is certainly not happening at present.

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