



GDA-Bi-annual Meeting of the NSW/Victorian Pig Industry Liaison Group (2011-13)

Final Report
APL Project 2011/2223

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I. Background

The Pig Industry Liaison Group provides a platform for veterinarians who service the pig industry in NSW and Victoria to meet with each other and with stakeholders (APL, State Government bodies, Researchers, Commercial Partners) to:

- I. Provide input into State government policies on biosecurity, traceability, quality assurance, welfare and the environment relevant to the pig industry.
- 2. Highlight emerging disease issues that could impact on the industry through reduced productivity, food safety, biosecurity, impacts on trade and/or public health.
- 3. Discuss issues relating to endemic diseases that are likely to impact on productivity and profitability.
- 4. Identify gaps in diagnostic capacity to support control and prevention of endemic and exotic disease.

2. Project Activities

Since 3/2/2012 and 2/12/2013, the Group has met on four occasions (26/7/12, 27/2/13, 21/10/13, 12/11/13). All meetings were conducted in Bendigo with an average number of participants at 17 per meeting. Minutes of the meeting are attached in Appendix I.

3. Summary

The Pig Industry Liaison Group has continued to attract support by key industry personnel, with a core group of attendees representing industry (Australian Pork Ltd, VFF Pig Group, Rivalea), private veterinarians (Chris Richards and Associates, Ross Cutler and Associates, Tony Fahy) and government (T Holyoake, J Morgan, A Lee). This is a rare and necessary opportunity for industry and government to meet to discuss topical industry issues.

Appendix I

Minutes: Pig Industry Liaison Group Meeting July 2012

Attendees

Bernie Gleeson (CRA), Hong Lin (CRA), Sarah Jenkin (CRA), Sarah de Greef (CRA), Hugo Dunlop (CRA), Steve Green (Vic DPI), Jack Gwozdz (Vic DPI Attwood), Brock? (Rivalea), Anke Woeckel (Rivalea), John Harkin (Vic DPI), Tony Fahy (Vic DPI), Trish Holyoake (Vic DPI), George Downing (Vic DPI), David Champness (Vic DPI), Jayce Morgan (NSW DPI), John Bourke (President VFF Pig Group), Pat Mitchell (APL)

Apologies: Aileen Vanderfeen (ACE Laboratories), Rob Rosaia (Rivalea), Amanda Lee (NSW DPI), Deb Finlaison (NSW DPI), Ross Cutler, Roger Paskin (Vic DPI), Cameron Bell (Vic DPI)

Item 1: Passive Disease Surveillance Strategies for the Pig Industry. How Can They Be Improved?

- Early detection of emergency animal diseases (EADs) and diseases that may impact on trade and/or public health in the pig industry relies on detection and reporting of new or unusual diseases. There are no targeted active disease surveillance activities for pigs. Passive surveillance is undertaken through laboratory testing of endemic diseases. It is important that there is sufficient laboratory throughput to ensure that we are able to detect significant diseases and to report to our trading partners that we are confident that we are free from FADs
- Vic DPI encourages laboratory submissions through the "Significant Disease Investigation" system. There is a similar system for NSW (check with Amanda Lee). A SDI is:
 - An unusual or atypical manifestation of disease, including high morbidity, mortality and/or rate of spread;
 - An initial investigation which fails to establish a diagnosis, including when veterinary treatment does not produce the expected response; or
 - There are findings suggesting a possible effect on trade, public health, biodiversity or the viability of a farm, industry or region, excluding events where there is a genuine suspicion of an emergency animal disease.
- The SDI system in Victoria pays the following to veterinary practitioners:
 - \$300 + GST to the veterinarian for undertaking and reporting the initial disease investigation to DPI using a RODE form
 - Laboratory testing costs up to \$500
 - Undertaking and reporting a follow-up investigation to DPI using a RODE \$300 plus GST
 - o In addition to the veterinary practitioner subsidy, there is a livestock industry-funded subsidy of \$200 excl GST for pig producers for the engagement of a veterinary practitioner to undertake a SDI (a maximum of 20 producer subsidies are available for pig investigations Check with DPI on this when you submit a sample). This subsidy is for the veterinarian's consultation, disease investigation (e.g. autopsy) and travel costs, excluding medications, and is provided as a deduction from the practitioner's fee; the practitioner will then be reimbursed by DPI. The subsidy is only applicable for significant disease investigations authorised by DPI.
- Payment for investigations to veterinary practitioners for cases affecting pigs in Victoria is conditional upon the following:
 - o Authorisation by DPI (Trish or Tony) for the investigation.
 - Samples and RODE (Record of Disease Event) form submitted to the DPI Pig Health and Research Unit. Unless the RODE is provided with the sample submission, the submitting vet will be responsible for the costs of diagnostic testing.

- Testing is undertaken in consultation with DPI staff, including submission of samples to external laboratories. If a specialist request is made (eg. histopathology to go to EMAI instead of DPI Attwood at the private practitioner's request), extra costs may be borne by the private practitioner.
- A copy of the veterinary practice's invoice to the producer must be provided to DPI showing the \$200 deduction if a producer subsidy is being claimed.
- An itemised tax invoice with the above documentation attached provided to the DPI for \$300 plus GST for the RODE and up to \$200 excl GST for the livestock producer subsidy.
- For each case, data on the farm, the case and the final diagnosis are entered into the DPI's data collection system (Bioweb) system by the relevant DPI staff member.

Action: Private practitioners to be aware of the SDI system and to consider submitting samples to PHRU if the case qualifies as an SDI (talk with Trish or Tony).

- Abattoir monitoring is currently undertaken by DPI (Patrick Daniel) as part of the Pig Surveillance Project (the Pig Health Monitoring Scheme). This is supported by the levy paid for by pig producers in Vic and NSW (16c/pig sold in Victoria). Bulk data (number of herds & pigs inspected, prevalence of lesions) from abattoir inspections are entered into the PHMS reporting system and reported on a quarterly basis to industry (SIPAC, VFF Pig Group). Individual reports are provided to the consultant vet and the producer (as required).
- The group enthusiastically supported this activity at the meeting. There was keen interest by CRA vets to participate in training to improve reporting consistency. There were preliminary discussions with Rivalea (Anke) to train relevant staff (vets and QA personnel?) as was undertaken historically in abattoir monitoring.

Action: Trish to develop a Group Demonstration Award application to APL for funding to train stakeholders (private vets, DPI AHFS, NSW DPI staff?) in abattoir monitoring to increase PHMS database.

Action: Trish to discuss with private practitioners opportunities for PHMS data sharing in a confidential manner.

• There are currently 8 herds participating in the sentinel herd component of the Pig Surveillance Project. Each herd is visited by DPI AHFS 10 times each year. During the visit, the DPI staff member reviews biological performance data, inspects pigs for disease prevalence and conducts post mortems. This is a disease surveillance and training exercise for the DPI. The program was well supported by the two private veterinarians at the meeting who had herds involved in the program. There was no negative feedback from anyone.

Action: Private vets to consider nominating herds for the sentinel herd program to Trish.

Item 2: News from Vet Chemicals & Stockfeeds (G Downing); CRC Sub-program 2 (P Mitchell)

A) Farm and feed mill audits by DPI have identified some instances where prescribing and dispensing of S4s is not undertaken according to current legislation; AVA best practice (G Downing). There is likely to be increased scrutiny in this area.

Action: Tony and George are co-ordinating the development of Prescribing and Dispensing Guidelines for pig veterinarians—to work in concert with systems for monitoring S4 application by producers on-farm.

B) Subprogram 2C of the Pork CRC focuses on antibiotic replacement with integrated health strategies. The outcome of this is a 50% reducing in antibiotic use over the 7-year lifespan of the CRC. There is currently no way of monitoring antibiotic use by the pig industry in Australia (compared to other many other countries). Pat Mitchell is currently PI of a project "Validation of data collection on pig farms in Australia) as the first step to monitoring antibiotic dispensing by some pig veterinarians.

Item 3: Welfare update

- Jayce Morgan presented on a welfare case in NSW and asked if there were policies on how to handle such a case. The group agreed that the farmer was breaching a number of welfare standards (although there was some debate on this) and in NSW this farm should be provided with extension support (eg. opportunity to leave the industry) and if no improvement, that the RSPCA should be notified.
- David Champness updated the group on the LMA. Clarified the need for farms to undertake a welfare risk assessment (template available on DPI website) if they are not part of APIQ. Standard 3.2.I was clarified so that there is not a requirement for pigs to have water or a suitable liquid available at ALL times. The key component of this standard was that the physiological needs of the pigs were being met with the farm's method of providing water to pigs (to be assessed in some way by the consulting veterinarian).

Item 4: Stockperson training

 Private vets can conduct training of stockpersons to meet the MCOP competency requirements. RTO assessment of these competencies to gain a Nationally-recognised qualification or as part of the Pork Industry Stockperson Skill Set would incur an fee (enrolment for the Certificate). Producers participating in Cert III training can apply for State and National funding to gain their qualification. Funding supports both the trainee and the manager as part of the traineeship program.

Minutes: Pig Industry Liaison Group Meeting February 2013

APV Sick & Injured Pig Guidelines

Developed by APV, auspiced by AVA and APL for veterinarians.. The group agreed this was
a valuable document to support welfare in the industry. The triage section was seen as
particularly useful for producers, with this section possibly being reproduced in other
formats for use on-farm for stockperson training. It is anticipated that this document will be
reviewed and updated regularly.

Legal aspects of "fit to load".

- The national Standards for land transport of livestock will be incorporated into legislation in each state. In Victoria, this will fall under the Livestock Management Act. These will replace the old transport Standards.
- There was feedback from DAFF that sows hauled long distances (eg from farms to Forbes saleyard to Melbourne for processing) were a high risk population and may require spelling mid-journey as per the new standards
- The quality of trucks used to transport pigs was identified as an issue, particularly in regards to poor flooring being a risk for hoof damage. There was discussion that producers receiving feedback from the abattoir of condemnations resulting from transport events were likely to

self-regulate the transporter, hopefully improving quality.. The design of some trucks was identified as a risk for damage to pigs' backs during unloading. It was suggested that DPI staff could play a role in improving welfare through a presence at abattoir during unloading.

Abattoir perspectives (DAFF)

- DAFF has no legal jurisdiction for animal welfare. Adverse welfare incidents resulting from events occurring involving animals prior to arriving to the abattoir are reported internally, and a Welfare Incident Report is generated if deemed appropriate. Reports are forwarded to relevant State regulators (DPI in Victoria) for investigation. This process may take 1-2 weeks. DAFF do not provide feedback to any other stakeholder on adverse welfare incidents. There may be feedback direct from the abattoir to the producer/veterinarian in the case of adverse health incidents, less severe welfare incidents and/or food safety/quality concerns.
- The reporting format is currently under review to include photographic and video evidence (if relevant). DPI staff identified the lag period for notifying them as a shortfall in the current procedure, and that collecting of crucial evidence is difficult when there is such a delay in reporting.
- Domestic abattoirs welfare is managed through their own QA systems auspiced through PrimeSafe certification. DPI staff undertake inspections annually, mainly targeting animal identification.

Fit to load guide

- The FTL Guide was seen as a useful supportive document for stockpersons loading pigs. APL have withdrawn the document temporarily from its website as: (1) it was being perceived as a legal standard, (2) it requires a review, (3) the links and references require updating.
- APL have funded a review of transport procedures and mortalities for pigs in Australia.
 Review included finisher pigs transported to export abattoirs in NSW, Qld and SA.
 Mortalities among this cohort were below a number of international countries, with long travel time s and hot weather identified as risk factors.

Progress on APV Prescribing and Dispensing S4 Substances

 APV guidelines are in the process of being revised, in response to a recent event with perceived non-compliance with legislation in WA .Relevant documents were distributed at the meeting. The differences between state legislation were identified as a major problem when developing a national set of guidelines.

Legal aspects—case studies

- Products with a therapeutic claim must be registered with APVMA. Examples included Zinc Oxide >125ppm, chromium picolinate, mycotoxin binders. This applies to substances where there are relevant data in the literature, even without a label claim.
- Deltamethrin is registered as a pour-on for mosquito control in other livestock spp. So you
 could use it off-label. Current residue data does not include skin. Hence, there is a residue
 risk with using this product.
- Ceftiofur has label restraints and cannot legally be administered topically, intramammary or orally. It selects for beta-lactamase producing bacteria with multiple drug resistance that are a public health concern.
- A registered product is not the same as a registered active ingredient. If the end product is not registered in another food producing animal species, then it cannot be used (even off label) in pigs. You cannot legally use a product that is not registered, even if the active

ingredient is. Asprin and fenbendazole were given as examples. The exception is use in I animal. Post-script from GD...

":Just to clarify the question that was asked in relation to fenbendazole and sodium salicylate. Fenbendazole is available as a registered product in liquid form for sheep and cattle and could be used off-label. There is an approved active constituent but it is not a registered product and therefore cannot be used for mass medication."

"Sodium salicylate (asprin) is available in a registered injectable form for dogs and horses. There are other registered products but they contain other active constituents, such as phenylbutazone and copper sulphate. Any other form of sodium salicylate e.g. powder form, would be an unregistered product."

"I had mixed feedback from the APVMA re the need or otherwise to register Biomin Biofix Pig. The final word is that the product does not require registration because binders are listed in the excluded non active constituents order."

Minutes: Pig Industry Liaison Meeting 21st October 2013

Attendees

J Bourke, P Mitchell, G Rawlin, S Jenkin, E Burrow, H Lin, M Ramsey, L MacFarlane-Berry, T Fahy, I Connaughton, A Woekel, A Lee, T Holyoake, Y Segal, J Wall

Topics

Laboratory Diagnosis of Influenza (G Rawlin)

Pandemic H1N1 2009 Influenza has been diagnosed recently in pigs on at least 3 farms in Victoria in the last 3 months. This strain of Influenza in pigs is restricted to the respiratory tract and does not cause systemic disease (in contrast to other strains of influenza such as HPAI). The virus in its uncomplicated form causes interstitial pneumonia in pigs with very little gross lesions (lungs may fail to collapse). Histological lesions include necrotic bronchitis. Laboratory diagnosis is confirmed at Agribio using Influenza A-specific PCR (6 hr run time) conducted on nasal swabs in virus transport media (VTM). Swabs, tissue and blood (sera) is transported to AAHL for testing using Influenza A-specific serology (competitive ELISA and haemagglutination inhibition, HI), species-specific PCRS and virus isolation (2-3 weeks).

Influenza Regulations and Case Studies (T Holyoake)

Any Influenza A infection in pigs is classed as "Swine Influenza" in Australia (according to AUSVETPLAN) even though it is not truly a "Swine Influenza" virus. Hence, Pandemic HINI 2009 Influenza (which is a human strain) falls under this definition. True Swine Influenza and the Human Pandemic HINI, are notifiable diseases of pigs in Australia, but they are not listed on the OIE notifiable diseases list. HINI influenza (and others identified in pigs in Australia) are lowly-pathogenic and do not cause systemic infection. As infection with HINI is endemic in the human population, this may be considered "low risk" in terms of public health if found in pigs. The current Animal Health Committee (AHC) "Guidance Document for the Management of Pandemic HINI 2009 in Pig Enterprises" was finalised 22/3/2010. Section 6 (Market maintenance) outlines requirements of pig enterprises infected with HINI, including notifying processing plants, buyers and AQIS following confirmation of a diagnosis in their herds. There is also reference to movement restrictions under Section 3 (Containment). There is no good rationale or justification for these requirements and they would cause unnecessary alarm in the pig community.

Studies undertaken on 3 farms in Australia approximately 2 years after the onset of HINI suggest that infection persisted (or was re-introduced) on 2 of the 3 farms. Recent case studies suggest (I) infection with (uncomplicated) HINI is mild, resulting in short-term coughing, (2) is likely to be spread among herds through poor biosecurity practices by human caretakers, and (3) active seroconversion in weaner pigs occurs within 9 days of infection. Some farms can be positive for HINI without showing any signs of respiratory problems e.g. the Goulbourn Valley case in August 2009.

Influenza Discussion (All)

- Current AHC policies deter veterinarians and producers from reporting suspicion of influenza in pigs due to the negative "fallout" of Section 6. This hampers surveillance for the disease.
- APL is in discussions with AAHL and DAFF to conduct an abattoir-based survey of influenza in pigs.
- Action: T Holyoake, A Lee and P Mitchell to draft a paper to AHC outlining why the current policy needs to be changed based on the negative impact on surveillance for influenza in pigs and to send this to M Ramsey for consideration and further action.

Veterinary Medicine Update (G Downing)

George discussed the legislation on supply of Schedule 4 substances. Among the discussions:

- Wholesalers can sell to other wholesalers or to veterinarians
- Veterinarians cannot sell to veterinarians for third party use unless they hold a wholessale licence
- Wholesalers in Victoria cannot sell directly to piggeries
- There is anecdotal evidence to suggest that unregistered veterinary chemicals (including feed-grade medications and other chemicals eg citric acid) are being included in pigs' feed in Victoria.
- It is illegal to use unregistered veterinary chemicals in food-producing animal species.

Olaquindox Update (Pat Mitchell)

Pat Mitchell advised attendees of recommended risk management measures from the 21st Codex Committee on Residues of Veterinary Drugs in Food (CCRVDF) meeting in September 2013. In 1994, JECFA considered olaquindox to be a health related hazard because it was found to be (a) genotoxic, (b) a potential germ cell mutagen and (c) tumorigenic while the mode of action for tumorigenesis could not be identified. JECFA concluded that it was not appropriate to establish an ADI or recommend MRLs; based on the available information, a concentration in food could not be established below which an exposure may be expected to be deemed safe. Although work has been conducted to show that residue levels at the analytical limit of measurement (1 μ g/kg for all tissues) may be expected to be associated with negligible risk, the withholding period to achieve this may be 50-60 days, this effectively negating its use by the pig industry.

The outcome of the discussion on drugs without an ADI with respect to olaquindox was:

In view of the JECFA conclusions, although insufficient and lack of data were available to establish a safe level of residues of olaquindox or its metabolites in food representing an acceptable risk to consumers, significant health concerns were identified. For this reason, competent authorities should prevent residues of olaquindox in food. This can be accomplished by not using olaquindox in food producing animals.

APL continues its watching brief on this issue. In time, it is considered likely that olaquindox will not be available for use in pigs by veterinarians.

Food Outlet Survey (G Downing)

A survey of 615 food outlets undertaken by DEPI staff in the first 6 months of 2013 revealed that 71 had supplied pig farms with waste food. Sixty nine of these were identified. Seven were found to have previously fed swill whilst four were found to be feeding swill. As a result of this finding, media releases and letters to all registered pig owners in Victoria have been distributed to improve awareness of swill feeding. Discussions are ongoing with Department of Health and local councils to increase awareness of swill feeding and responsibilities of food outlets. There is a plan to develop and legislate biosecurity standards for the pig industry, in conjunction with APIQ.

Minutes Pig Industry Liaison Group Meeting November 2013

Attendees

S DeGreef, E Borrow, H Lin, H Dunlop, To Fahy, M McCormick, K Moore, R Wilson, S Simjee, A Vanderfeen, S Kock, T Holyoake, ACE lab technicians (x 3)

Apologies: B Gleeson, A Woeckel

Tobic

Dr Shabbir Simjee Microbiology Technical Advisor (ELANCO Animal Health) provided information on antimicrobial sensitivity testing methodology. In particular, he discussed the Clinical Laboratory Standards Institute (CLSI) and how it is the "gold standard" for determining antibiotic breakpoints for veterinary pathogens. CLSI (based in the US) is the only "vet-only" reference organisation for this data.

Dr Simjee explained the difference between Epidemiological cut-off values (ECVs) and Clinical cut-off values for antibiotic MICs. The former is recommended for monitoring antibiotic resistance over time with trends, whilst the latter has more relevance of clinical efficacy. It is important to determine which method(s) are being reported. For example, MARAN (Netherlands) and SVARMS (Sweden) use ECVs for monitoring, hence this is not clinically relevant. In some reports (eg DANMAP), ECVs and CCVs are reported in the same tables to demonstrate changes in antibiotic resistance of pathogens over time.

The group discussed the relevance of ECVs, CCVs and monitoring antimicrobial usage/resistance trends over time. It was recommended that the ideal system would:

- 1. Monitor volumes of antimicrobials sold in Australia, by species
- 2. Monitor resistance trends (ECVs) over time of significant pig pathogens for key antibiotics (e.g. third generation cephalosporins)
- 3. Focus on monitoring resistance trends for newest antibiotics (forget older classes)