

## **Australian Government Department of Agriculture, Water and the Environment Update on relevant activities and issues**

### **AUSPestCheck animal health surveillance trial update**

The AUSPestCheck project, funded by the *Agricultural Competitiveness White Paper*, is trialling a data sharing and coordination software system capable of collating information to support National Animal Health Information Program reporting.

The purpose of the first phase of the project was to develop and trial a proof-of-concept version of AUSPestCheck™, which adapts the initial plant health surveillance version for sharing, collation and presentation of animal health surveillance data.

The following elements were successfully achieved during the first phase of the project:

- Provision of an information package to state Chief Veterinary Officers (CVOs) outlining the objectives and scope of trial program.
- Provision of access to CVO's and their nominated representatives to AUSPestCheck.
- Face to face meetings with all Chief Veterinary Officers and their nominated representatives to facilitate demonstration of AUSPestCheck and provide initial training/support.
- Invitation to upload test data into AUSPestCheck using a preformatted template.
- Support for jurisdictions to provide surveillance information using an Application Programming Interface (API).
- Collation of feedback from users.

Plant Health Australia have recently finished a major upgrade to the AUSPestCheck™ software. The updated version incorporates changes requested by stakeholders during the consultation process last year. AUSPestCheck™ now includes a flexible permissions structure, a staging area for data integrity purposes, and an application programming interface (API) to facilitate optional automatic data transfers. A Microsoft Power BI interface has been included to generate custom graphs, maps and other visualisations.

Over the coming weeks, Plant Health Australia will be contacting jurisdictions to arrange a time to demonstrate the upgraded system and seek further feedback on the upgraded system.

### **The OIE-WAHIS project**

The World Animal Health Information System (WAHIS) is the database administered by the World Organisation for Animal Health (OIE) through which countries meet their international disease reporting and notification obligations. The OIE has been redesigning and upgrading WAHIS to a new platform called OIE-WAHIS. The concept is to develop a 'nimble and user-friendly system' that has the following improved features:

- High-quality and reliable geospatial data, which will enable OIE Member Countries to undertake comprehensive risk analyses. Maps will be interactive, allowing for a dynamic display of information on animal diseases.

- The genomic data linked to epidemiological data in OIE-WAHIS will strengthen disease traceability and contribute to analyses on genetic epidemiology.
- Data from OIE-WAHIS will be usable in a variety of analytic programmes.
- OIE-WAHIS will provide straightforward and standardised ways to interconnect with other international or regional information systems. This will allow greater sharing of data and may permit the more streamlined upload of data from Australia's own databases, such as NAHIS or, in the future, AUSPestCheck.
- The WAHIS Alerts mobile application will be updated to provide a faster dissemination of disease alerts and instant access to disease notifications.
- OIE-WAHIS will be built to evolve as novel information technologies are developed or international standards change, which will help it remain fit-for-purpose in future.

A timeline for the implementation of OIE-WAHIS is included at Figure A below. The release of Phase I has been delayed and is now expected in late 2020. While immediate disease notifications can still be made through the legacy system, regular six-monthly reporting for all countries has been delayed until the new platform is live. This means that Australia's report for January-June 2020, usually made around September, will be delayed.

Staff from the Office of the Chief Veterinary Officer who are responsible for submitting Australia's data into WAHIS undertook webinar training on the new OIE-WAHIS platform in July. It was pleasing to see that the new interface does appear modern, intuitive, and to incorporate feedback on the previous system. Several streamlining features, including pre-populated data and automated background checks, promise to increase the speed and accuracy of reporting. This is especially true for follow-up reports to immediate notifications.

Figure A



### **International obligations**

The World Organisation for Animal Health (OIE) specifies several diseases for which a country may be declared as 'officially free', after meeting requirements described in the Terrestrial Animal Health Code. Each year, Australia must provide annual reconfirmation to the OIE in order to maintain its official free status for these diseases. There is a trend towards more rigour in the annual reconfirmation process, and in future, more robust data may be required for countries to maintain their free status. In past examples this has included information on disease exclusions, diagnostic testing capabilities, public awareness, and whether standard case definitions are followed.

For other diseases, a country may "self-declare" freedom. In these cases, the expectation is that a country has sufficient, appropriate data which meet requirements of the OIE code. Scrutiny of this data may occur bilaterally, for example, through trade queries or market access negotiations with a trading partner. There would be significant reputational risk if the information supporting any self-declaration was found to be insufficient. Any loss of reputation would have flow-on effects to Australia's international standing, and to trade.

### **Data to support export certification**

Surveillance data, including exclusion testing data from animal disease investigations, provide important evidence to support claims about Australia's animal health status. These data are often combined with qualitative, descriptive information about our animal health system to provide trading partners with the assurances necessary to facilitate trade in animal and animal products.

The department provides certification for the export of animals and animal products. Agreed certification, including bilateral protocols that form the basis of trade, often contain endorsements certifying Australia's freedom from a number of diseases. Certification is provided based on the Australian animal health system and supporting data. The department requires sufficient confidence to issue this certification, and without adequate data (or sharing of data), this confidence is being eroded. Further, any concerns about our system or data by trading partners could potentially affect international confidence in Australia's animal health systems and status.

### **Data to support importation policies**

Surveillance information is also important in supporting the need for risk management measures for imports into Australia. When formulating import policies, Australia must justify its disease status to apply risk mitigating conditions to imported animals or animal based products. Maintaining the rigour of this component of NAHIS supports trade. Ensuring that all relevant surveillance conducted is reflected in NAHIS is key to delivering this objective.

### **Unexpected trade queries**

Queries about Australia's animal health status and/or system by trading partners arise from time to time for a range of reasons. They may occur as a result of international disease events or concerns (e.g. outside of Australia), media reporting, queries raised through market access negotiations, or following audits/visits by trading partners. Where queries arise, there may be a need to rapidly obtain and compile robust information to address any concerns, and to ensure markets are maintained.

Unforeseen queries can expose gaps in Australia's surveillance system, if the available data or other supporting information are insufficient to address any concerns. This could have a range of possible effects. As examples, trading partners could impose more onerous import requirements on Australian animals and animal products (for example, pre-export testing) or impose trade restrictions in certain commodities. Their confidence in Australia's systems, as a whole, can be diminished.

### **Specific issues**

#### **Avian influenza**

A number of countries require certification for freedom from avian influenza (AI) for the importation of avian commodities. Historically, occurrences of highly pathogenic avian influenza (HPAI) and notifiable low pathogenic AI (LPAI) in 2012 and 2013 resulted in trade restrictions on live birds and avian products by a number of markets. Many of these restrictions were minimised shortly following each outbreak, through the provision of targeted surveillance data which demonstrated zone freedom. Most remaining restrictions were subsequently removed when Australia self-declared freedom from HPAI, after successful eradication of each outbreak.

Presently, eradication efforts continue for HPAI and notifiable LPAI outbreaks which have occurred since July 2020 on Victorian poultry premises. Like the previous outbreak, this has resulted in similar trade restrictions to many markets, with notable impact on the export of specific pathogen free (SPF) eggs to the US for the manufacture and supply of veterinary vaccines to Australia.

Import restrictions as a result of AI concerns have been imposed by China since the 2012-2013 AI outbreaks, which continue to have a considerable effect on trade in poultry products (including pet food). Since this time, Australia has also not regained access to other markets for live birds/hatching eggs, due in part to HPAI concerns, despite having provided a substantial amount of information in support of our HPAI status. Additional robust surveillance data may assist in regaining access to these markets, after successful eradication of the recent AI outbreaks. Hatching egg access to the EU also requires that the country/zone or compartment of origin has an avian influenza surveillance program in place that meets the requirements either set out in Regulation (EC) No 798/2008; or in part ii of the OIE Terrestrial Animal Health Code.

Revised drafts of the 'Infection with avian influenza viruses' chapter of the OIE Code were circulated to member countries for comment following the meeting of the OIE Code Commission in September 2018 and May 2020. In brief – proposed changes to the chapter included: to modify the definition of AI to include only HPAI, i.e. exclude low pathogenicity H5 and H7; that surveillance for demonstrating freedom from HPAI should include monitoring of H5 and H7 LPAI viruses in poultry. If these/similar changes are implemented there will be implications for Australia's ability to self-declare freedom from HPAI as surveillance for H5 and H7 LPAI is not currently conducted in poultry.

#### **Salmonella control program**

Australia has received interest from poultry exporters in accessing EU markets. Currently, Australia cannot export breeding chickens, day-old chicks and hatching eggs to the EU because a Salmonella control program in accordance with Regulation (EC) No 2160/2003 has not been submitted to the Commission or approved by it. Australia's existing Salmonella pullorum and Salmonella enteritidis accreditation programs do not meet EU requirements. A broader, more robust surveillance and accreditation program for Salmonella may assist in opening further poultry export markets.

#### **African horse sickness**

African horse sickness (AHS) is an OIE listed exotic, nationally notifiable disease. Australia's import conditions for horses require that countries approved for the importation of horses have been free from AHS for the last two years and do not vaccinate. On 27 March 2020, Thailand notified the OIE of the detection of AHS. More recently, Malaysia notified the OIE of the detection of AHS on 2 September 2020. The AHS outbreak in Thailand has been confirmed as serotype 1 and is thought to be associated with the importation of zebras from Africa. The serotype and source of the infection in Malaysia is yet to be reported.

AHS in South East Asia is a biosecurity concern for horse and equine semen imports and other commodities. Thailand and Malaysia are not approved countries for the direct importation of horses or equine semen, so there is no direct biosecurity risk from these incursions. However, the potential spread of this vector-borne disease to neighbouring countries provides an entry pathway for this disease into Australia. Some of these countries are approved for the importation of susceptible equids to Australia and provide significant transportation hubs for the movement of horses to Australia from areas such as Europe. The department is reviewing its transportation policy for live horses following the recent changes and has reached out to regional trading partners looking for joint approaches for control and surveillance. In addition, there is other work involving the department in a review of the AHS AUSVETPLAN.

#### Equine piroplasmiasis

Equine piroplasmiasis is an OIE listed exotic and nationally notifiable disease of horses. It is caused by protozoa (*Theileria equi* or *Babesia caballi*) which can be transmitted by ticks, iatrogenically or transplacentally. On 22 May 2020, New Zealand notified the OIE of the detection of *T. equi* in a previously imported horse currently resident in New Zealand. Following this detection, the department revised its import conditions for horses from New Zealand to include testing. New Zealand's investigation into this incursion and potential contacts of the infected mare is still ongoing.

As part of this surveillance, New Zealand has recently informed the department that a number of horses identified in tracing activities had been imported into Australia prior to the detection. To verify that the biosecurity risk is consistent with Australia's appropriate level of protection (ALOP) and to assist New Zealand's investigation, the department is tracing these horses. The department is currently working collaboratively with state colleagues to trace these horses. The likelihood that any of these animals is infected is very low as previous testing results from horses in the tracing group have all been negative.

#### African Swine Fever

There is continued spread of African swine fever (ASF) globally. ASF has generally been present in countries of sub-Saharan Africa, and continues to spread through parts of Europe (including the Ukraine and Russia) and Asia. Major jumps in the disease have been attributed to the movement of contaminated pig meat and/or pig meat products.

The spread of ASF throughout South-East Asia (SEA) is concerning because of the increased risk to Australia, primarily through the movement of animals and animal products outside of formal trade pathways. As a result, there is increasing scrutiny on Australia's risk management systems, including national surveillance for ASF.

The department continues to review and take necessary action to address that risk at the border. The focus is on legal and illegal import of pigs and pig products through cargo, mail and traveller pathways. However unregulated pathways still pose a risk and early detection of ASF is vital should an incursion of this virus occur.

Surveillance data supporting Australia's free status will be of interest to trading partners and will be important for potential Australian pork market access. Early detection also helps put us in a better position to control and eradicate the disease, should ASF reach Australia. This is crucial in areas where feral pig populations are significant.