

Jurisdictional update – *Salmonella* Enteritidis (SE) NSW

Summary (as at 21 May 2019)

- [REDACTED] s 45/ 47B/ 47E/ 47G [REDACTED]
[REDACTED]
[REDACTED]
- SE has been detected on nine NSW and one Victorian egg layer farm. All farms are interconnected in that people, eggs or equipment were moving between them. Three NSW farms were linked to human illness clusters from restaurant or retail settings.
- In NSW, the current on-farm response is focussed on managing the infected properties and undertaking surveillance activities. Planning is underway to transition from response to management through normal business processes.
- Control measures have included: voluntary consumer and trade level egg recalls, product withdrawals, voluntary product test and hold systems, improvement notices and prohibitions orders placed on egg businesses and restaurants, consumer advisory warnings, and on-farm biosecurity directions to stop movement of eggs into the marketplace.

Human illness

[REDACTED]
[REDACTED]
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[REDACTED] s 45/ 47B/ 47E/ 47G [REDACTED]
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Proactive surveillance was then undertaken across NSW (majority in Sydney area and Mangrove Mountain area) by DPI and industry resulting in further SE-detections.

Since September 2018, four NSW egg businesses have voluntarily recalled eggs from the marketplace. The Food Authority issued prohibition orders on three restaurants under the *NSW Food Act 2003*.

Properties of concern

In NSW, there are 22 properties under active surveillance by industry (10) or government (12): excludes 9 infected properties (IP). SE monitoring at these properties will continue for six months at weekly or fortnightly testing intervals. After three months this shifts to monthly testing for up to six months.

All IPs are interconnected in that people, eggs or equipment were moving between them. The last IP was notified to NSW DPI on 10 May 2019.

All IPs have been issued an individual biosecurity direction under the *NSW Biosecurity Act 2015* that includes the “quarantine” of premises to stop movement of eggs into the marketplace. All have rodent control programs in place and have depopulated/disposed of birds, removed eggs, packaging, and manure (or this is underway). These properties remain under an active surveillance program to ensure they are complying with the biosecurity directions issued by DPI.

For properties that depopulate, decontamination and disinfection requirements also apply before facilities can resume operations. Currently all IPs are still undergoing decontamination by the producer or landholder. Decontamination of infected sites has proved challenging, as SE remains in the dust and organic material for over 12 months and rodents and insects are a common vector. None of the IPs have restocked.

Properties neighbouring an IP have been advised to review their biosecurity systems. Information is available on the NSW DPI [SE webpage](#) though some businesses will require the assistance of a veterinarian. Industry has provided a consultant to assist businesses until the end of May 2019. NSW DPI is looking how to extend these industry liaison services.

Changes in risk management requirements

Measures being explored to improve egg industry integrity will variously need to be implemented under biosecurity legislation and/or food legislation.

A cross-jurisdictional SE working group on *Salmonella* vaccination has developed a paper that was submitted to the Animal Health Committee (sits under the National Biosecurity Committee). This paper discussed different options for potentially incorporating *Salmonella* vaccination as a management tool on SE-infected properties. The recommendation of this paper was development of an autogenous, inactivated SE vaccine of the current outbreak isolate. The group recommended that this vaccine should be applied at least twice in affected and in-contact farms. A response from the AHC is pending.

NSW uses the national Food Safety Risk Priority Classification Framework to classify food businesses and implement an appropriate level of regulation commensurate with their food safety risk. Application of the framework to the egg industry and development of associated food safety standards occurred when there was no evidence of SE in Australian flocks. The priority classifications applied to NSW egg businesses are currently being examined to determine whether they remain fit for purpose given the change in risk created by SE. Current classifications and flow on regulatory requirements such as audit frequency, traceability and record keeping requirements will change. The rollout of a new food safety program will commence 1 July 2019 to all licensed egg businesses in NSW.

The use of a State-wide control order covering commercial operations (premises required to be licenced under the *Food Act 2003*) to prevent, eliminate, minimise or manage the biosecurity risk associated with SE is anticipated. This control order would mandate biosecurity practices across the State on poultry farms. Checking compliance with the control order would be done as part of the audit process of licensed egg businesses in NSW.

It is intended that any current or future IP will not be allowed to restock or engage in egg production unless they have been assessed and fully comply with the control order and any additional biosecurity measures they must meet prior to restocking. This will be enforced by application of conditions on the Food Authority licence for that business. An Individual biosecurity direction would be used to stop any resupply of birds onto property.

National response plans

NSW broadly followed the Australian Eggs SE response plan and will seek Animal Health Australia's endorsement for the development of a new and upgraded plan to be available nationally for each agency or State to utilise when required. NSW will take the lead on developing the plan.

It is anticipated that the Australian Chicken Meat Federation will have an industry agreed SE response plan specific for the chicken meat industry by the end of May 2019.

Research

Sydney University is leading a project on the infectivity of the SE outbreak strain in layer hens in collaboration with DPI. Phase 2 of this project aims to investigate the efficacy of vaccination (subject to further funding).

As part of the effort to determine where the current SE strain originated from, NSW Health has been in contact with custodians of several international databases to identify any similar strains already reported. To date the US Centers for Disease Control and Surveillance have advised they have only one matching strain, which is the known case in an international traveller already linked to the outbreak,s and the UK Government has work underway to compare the NSW SE strain sequence against SE sequences in UK public health and animal health laboratory databases.