

Salmonella Enteritidis

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Animal Biosecurity, NSW DPI

Introduction

Salmonella Enteritidis (SE) is a bacterial disease of poultry and is high-risk for causing foodborne illness in humans. It may present clinically in birds as depression, poor growth, weakness, diarrhoea, and dehydration.

Possible sources of infection in commercial layer flocks include transmission from breeders, contaminated environments, infected vermin (including rodents) and contaminated feed.

Transmission to progeny from breeders is mainly through eggshell contamination, although transmission through the egg may also occur.

Consumption of infected eggs can make people ill. Due to the high food safety risk, SE is a notifiable disease in Australia. This means that there is a legal obligation to notify authorities if you know or suspect that poultry are infected with this disease.

Why is *Salmonella* Enteritidis important?

The Australian egg industry is considered free of SE, which is a type of *Salmonella* that is present in most international egg industries.

Salmonellosis is one of the most common and widely distributed foodborne diseases. *Salmonella* outbreaks can have particularly severe consequences in highly vulnerable people, like those who are young, old and immunocompromised.

The potential cost to the community and to the egg industry if SE became established in Australia is very high. It would have implications for our domestic market, but also for the developing export market, where Australian produce is considered to be safe and disease free.

How can I control the risk of *Salmonella* Enteritidis on my farm?

You should have a documented biosecurity program to monitor for and prevent the introduction of SE on your property or spreading between poultry sheds on your property. This could include:

- An appropriate vaccination strategy after discussion with your private veterinarian

- Buying pullets that are tested and confirmed to be SE-free
- Buying feed from a mill that monitors for Salmonella
- Becoming a member of the Egg Standards of Australia voluntary quality assurance program
- Having a documented ingredient and feed testing program for home diets – sighted during audits
- Not allowing people coming back from overseas and suffering from diarrhoea to work on the farm or handle birds
- Storing eggs on-farm promptly in a cool environment where the thermostat temperature is set at less than 15°C, but greater than 1°C
- Providing birds with drinking water derived from town water or water that has been effectively sanitised in line with the National Water Biosecurity Manual - Poultry Production
- Implementing an effective auditable vermin control program and using rodenticides in compliance with Australian Pesticides and Veterinary Medicines Authority (APVMA) label instructions
- Storing feed in areas not accessible to other animals (including vermin)
- Ensuring workers, particularly in the egg collection processing area, are familiar with and follow personal hygiene measures to minimise the risk of transferring Salmonella from humans to poultry or eggs.
- Following recommended industry practices on the farm, particularly in the egg collection and grading area, in order to minimise risks associated with SE cross-contamination between equipment, eggs and humans
- Cleaning shared equipment before it is used.

Is there regular monitoring for *Salmonella* Enteritidis in layer flocks?

There is a National *Salmonella* Enteritidis Monitoring & Accreditation Program (NSEMAP) available to all commercial egg producers in Australia.

NSW Department of Primary Industries (NSW DPI) administers the NSEMAP.

An accreditation certificate can be issued by NSW DPI for accredited flocks, which can be used as evidence of the SE-free status of these flocks and their eggs for export markets.

It is estimated that over 75 per cent of Australian layers are currently part of *Salmonella* monitoring through the NSEMAP.

Further information is available at <https://www.dpi.nsw.gov.au/animals-and-livestock/poultry-and-birds/health-disease/national-salmonella-enteritidis-monitoring-and-accreditation-program>.

Egg Standards of Australia

Egg Standards of Australia is a voluntary quality assurance program that has been developed to provide a practical mechanism to demonstrate compliance and continuous improvement with egg production standards.

Egg Standards of Australia provides a compliance framework for egg farmers in meeting the needs of regulators, retailers, farmers and customers in areas including hen welfare, egg quality, biosecurity, food safety, work health and safety, and environmental management.

Further information is available at <https://www.australianeggs.org.au/for-farmers/egg-quality-standards/>.
