



Government of **Western Australia**  
Department of **Health**

# Foodborne Illness Reduction Strategy 2023-2026

A risk management approach to foodborne illness reduction



## Foodborne illness in Western Australia

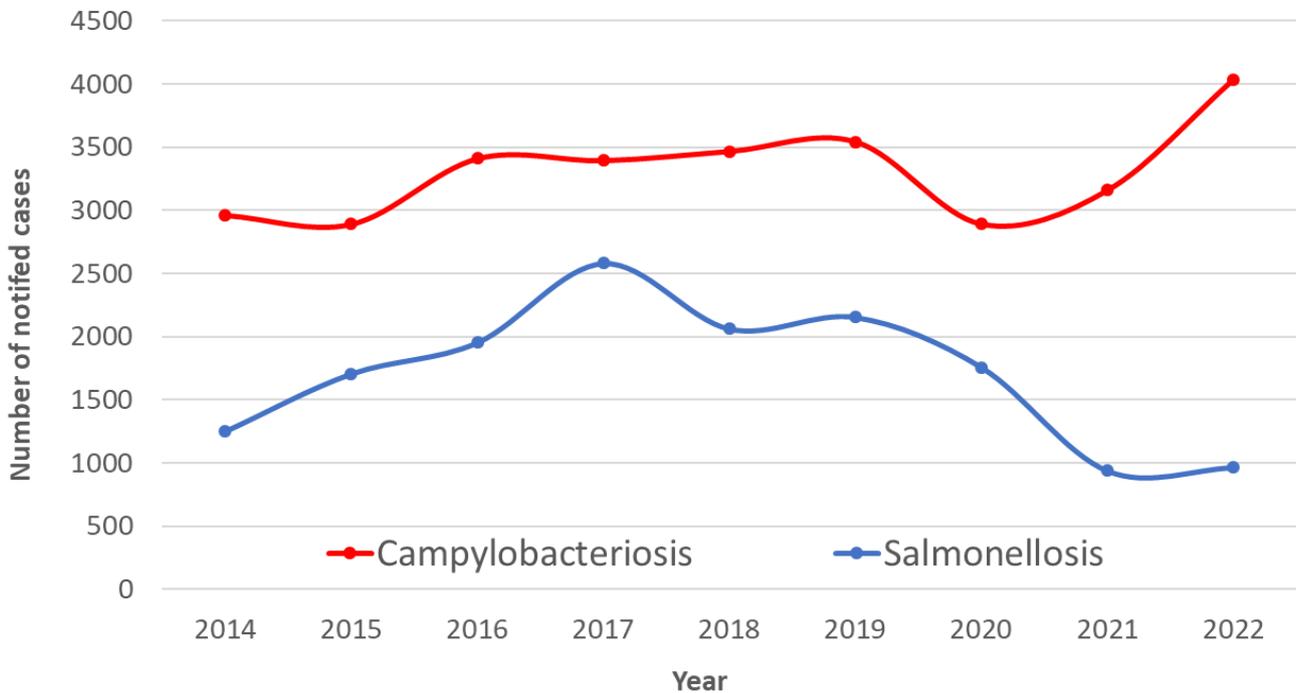
In 2017, the *Australia and New Zealand Ministerial Forum on Food Regulation* (Ministerial Forum) prioritised the reduction of foodborne illness related to *Campylobacter* and *Salmonella* to further strengthen Australia’s Food Regulation System. To support this priority [Australia’s Foodborne Illness Reduction Strategy 2018-2021+](#) was developed with the aim of reducing the number of food-related human cases of campylobacteriosis and salmonellosis by 2021.

In Western Australia (WA), foodborne illness caused by *Salmonella* reached an all-time high in 2017, surpassing the national average by 1.5 times. Consequently, a cross-government advisory group was established to develop and implement WA’s Foodborne Illness Reduction Strategy 2018-2021 (WA FBIRS 2018-2021). By employing a risk management approach, WA’s salmonellosis rates reduced to below the national average by the end of 2022.

Despite these achievements, foodborne illness caused by *Campylobacter* remains the predominant cause of foodborne illness in WA. In 2022, WA experienced a historic peak in *Campylobacteriosis* rates, with a 28% increase in cases compared to the previous year. To address this public health issue, the revised strategy will build upon the risk-based management approach with the aim to decrease these levels over the next 3 years.

In 2022, there were 964 reported cases of salmonellosis and 4036 cases of campylobacteriosis in WA. However, it is important to note that the actual prevalence of these illnesses in the community is estimated to be nearly ten times higher than the number of notified cases due to under-reporting<sup>1</sup>. Based on the latest cost modelling by Food Standards Australia New Zealand (FSANZ)<sup>1</sup>, the total cost of salmonellosis and campylobacteriosis to the WA community and the health system in 2022 was estimated at \$75 million.

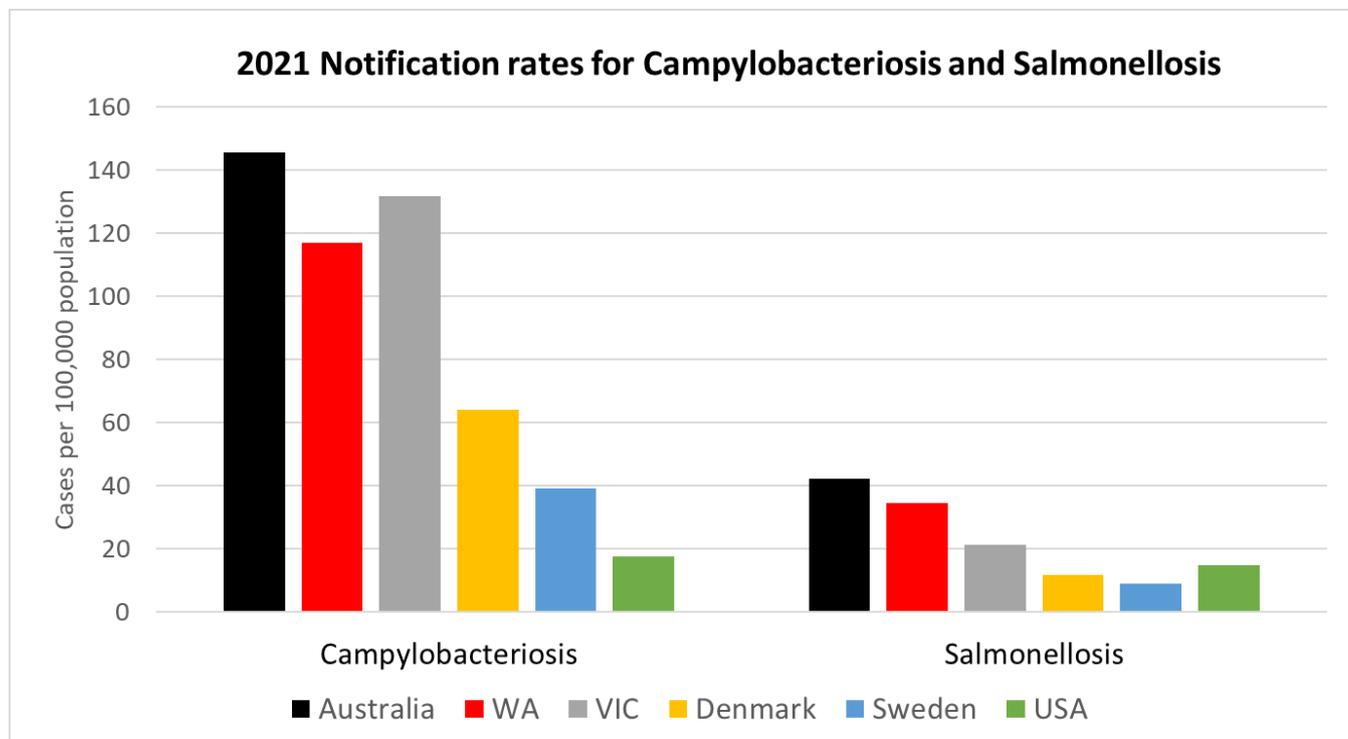
Western Australia notified cases



<sup>1</sup> Australia National University. “The annual cost of foodborne illness in Australia – Final Report for Food Standards Australia New Zealand.” 21 April 2022.

## Why is a strategy needed?

Despite significant progress made by the WA FBIRS 2018-2021 in reducing salmonellosis rates, WA's rates remain relatively high in comparison to Victoria and other countries like Sweden and the United States. Furthermore, WA's Campylobacteriosis rates in 2021, although among the lowest in the country, were still 200% higher than Sweden's and 557% higher than that of the United States. Notably, both Sweden and the United States have well-established Campylobacter surveillance and control programs. These findings highlight the potential for WA to further decrease the incidence of Campylobacteriosis cases.



To reduce the prevalence of foodborne illness in the community, it is imperative to manage food safety risks across every step of the food supply chain, starting from primary production and extending all the way to the supply of food to consumers. As different businesses are involved at each stage of the supply chain, each with their own industry-specific processes for overseeing and managing food safety risks, it is crucial to implement a coordinated approach to effectively address and mitigate food safety risks. This will prevent / minimise failures in food safety risk controls throughout the supply chain and to facilitate the communication of any required improvements up the supply chain.

### Aim of this strategy

To reduce the prevalence of locally acquired foodborne illnesses in Western Australia by 2026, with a focus on Campylobacteriosis reduction.

The successful interventions and programs in the previous strategy will form the basis of the management approach to reduce Campylobacteriosis cases in WA.

## **Establish and maintain an effective surveillance and response system**

Surveillance of enteric diseases and epidemiological investigation of foodborne illnesses in WA is undertaken by WA OzFoodNet (OFN). The findings of OFN's investigations are crucial in identifying the cause and source of foodborne pathogen infections in the community, which enables the Environmental Health Directorate (EHD) and Local Government (LG) enforcement agencies to carry out traceback investigations back through the food supply chain to identify where the food safety risks were introduced.

In WA, a robust system has been established in the past to effectively manage an extended community-wide outbreak of salmonellosis that persisted from 2017 to 2021. The experience gained from the Salmonella Outbreak Response Taskforce has not only fostered stronger collaboration within the Department of Health but also across external agencies. This collaboration will be maintained through the across-government advisory group, which will provide direction in the implementation of programs to reduce campylobacteriosis rates in WA. The implementation plan can also be modified to promptly respond to any emerging risks.

LGs in WA are responsible for the oversight of more than 24,000 food businesses. The proactive surveillance of food businesses by LG is an important activity to prevent foodborne outbreaks. By identifying non-compliant / high-risk food handling practices, early interventions can be put in place to mitigate food safety risks.

## **Minimise food safety risks at the primary production and processing stage**

Salmonella and Campylobacter are predominantly introduced into the food supply chain at the primary production stage. By reducing the pathogen contamination of food at this stage, there will be decreased reliance on downstream processes to make food safe.

Collaboration with the Department of Primary Industries and Regional Development (DPIRD), veterinarians and industry experts will enable the identification and implementation of practices that are effective in decreasing the prevalence of Salmonella and Campylobacter during primary production.

Under the current food regulatory framework, LGs are in the best position to work with primary producers to facilitate continuous improvements in their production practices. For this reason, it is crucial for EHD to provide the necessary technical support and tools to assist LGs in fulfilling their regulatory functions and promoting the reduction of food safety risks during primary production.

## **Raise consumer food safety awareness**

Based on the evaluation of food safety awareness interventions undertaken as part of WA FBIRS 2018-2021, critical gaps have been identified in consumer knowledge and behaviour around safe food handling. To address these gaps, targeted engagement with key stakeholder groups will continue to be undertaken to effectively disseminate key food safety messages to consumers.

## Sector-based initiatives

### Chicken meat industry

From the review of scientific literature<sup>2,3,4</sup> and the Department's food surveillance program results, chicken meat has been identified as the most common food source testing positive for *Campylobacter*. Based on food safety intervention programs in countries such as New Zealand and Sweden, *Campylobacter* control programs in the chicken meat industry have shown to effectively reduce the incidence of *Campylobacteriosis* cases within the community. The key findings from these programs will be taken into the consideration in the WA FBIRS.

Within this strategy, active engagement with the WA chicken meat industry will be undertaken to assess the prevalence of *Campylobacter* in local broiler farms and to identify feasible interventions capable of reducing the prevalence of *Campylobacter spp.* in chickens prior to the primary processing stage.

The Department will continue to work with poultry meat processors (abattoirs) through the Poultry Process Hygiene Criteria surveillance program to identify areas of improvements in the primary processing stage that will further reduce the *Campylobacter* loading in raw chicken meat.

### Egg industry

The WA FBIRS 2018-2021 identified several key control measures that proved successful in reducing the prevalence of *Salmonella* within the egg industry. These measures include *Salmonella* vaccination, improvements in rodent control and shed hygiene. Further reductions in *Salmonellosis* cases can be achieved by encouraging egg producers to improve on the implementation of these control measures.

### High-risk horticulture industry

FSANZ has three new food safety standards for the primary production and processing of Ready-To-Eat leafy vegetables, melons and berries. Proactive collaboration with industry and enforcement agencies will be undertaken to identify and implement food safety risk control measures throughout the food supply chain for the three commodities.

## Performance

### Review and evaluation

The cross-government advisory group will provide the governance for implementation and review of the strategy and reporting back to stakeholders on progress. The implementation plan of this strategy will be continuously refined by considering the epidemiological trends, and the evaluation of the interventions and programs implemented as part of this Strategy.

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<sup>2</sup> Walker, L. J., et al. (2019). "Prevalence of *Campylobacter coli* and *Campylobacter jejuni* in Retail Chicken, Beef, Lamb, and Pork Products in Three Australian States." *J Food Prot* **82**(12): 2126-2134.

<sup>3</sup> Wallace, R. L., et al. (2020). "Molecular characterization of *Campylobacter spp.* recovered from beef, chicken, lamb and pork products at retail in Australia." *PLoS One* **15**(7): e0236889.

<sup>4</sup> Wong, T. L., et al. (2007). "Prevalence, numbers, and subtypes of *Campylobacter jejuni* and *Campylobacter coli* in uncooked retail meat samples." *J Food Prot* **70**(3): 566-573.

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