

EMERGING RISK IDENTIFICATION SYSTEM
Enhancing Food Safety in New Zealand

Signals

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Haumarū Kai Aotearoa

A quarterly brief on emerging food safety issues (April-June 2023)

ERIS project secure for another year, new look “monthly brief”

The two-year pilot project to establish and run a food safety emerging risk identification system (ERIS) finished in April 2023. Thanks to ongoing support from New Zealand food industry organisations, New Zealand Food Safety and the Ministry of Business, Innovation & Employment, the ERIS service can continue for another year. Our industry funders now span the dairy, meat, poultry, seafood, horticulture and food assurance sectors (see page 2). Work continues to transition ERIS into a long-term, core NZFSSRC service.

We’ve taken the opportunity to change a few things. This quarterly newsletter will replace our previous monthly brief. NZFSSRC members can still contact us to get more information on emerging risks and we will still work directly with the Centre’s sector-specific Taskforces. Other changes will emerge over time.

Publication information

This brief has been prepared for the ERIS project funders and the NZFSSRC by Nicola King (ESR), with support from Kate Thomas (NZFS), Abhi Gautam (ESR).

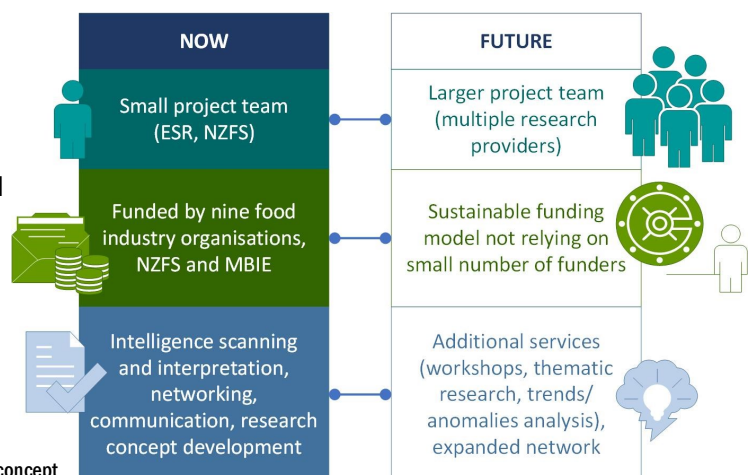
Institute of Environmental Science and Research (ESR) www.esr.cri.nz

New Zealand Food Safety Science and Research Centre (NZFSSRC)

ERIS website: <https://www.nzfssrc.org.nz/our-work/eris>

New Zealand Food Safety (NZFS) www.mpi.govt.nz/food-business

Contact: Nicola.King@esr.cri.nz



ERIS transition concept

News from the network

During May, the European Food Safety Authority hosted meetings with food safety regulators from around the world, and with organisations across Europe, to discuss emerging risks to food and animal feed. Among the items discussed were complex emerging issues, such as the risks emerging from circular economies or water scarcity, and food safety threats associated with conflict or crime.

Bacillus cytotoxicus was flagged as a bacteria to watch because its importance as a foodborne pathogen, and indeed a human pathogen, is not yet clear.

The introduction of a nano-sized material (Z15) to improve wastewater treatment in Ireland sparked conversations about the potential for this to enter the food or feed chain and whether this would pose a health risk. Also discussed were occasional findings of high concentrations of cadmium in flaxseeds, per- and polyfluoroalkyl substances in eggs and microbiological hazards in plant-based foods marketed as alternatives to animal products.

These meetings also serve as a way for organisations to share emerging risk detection methods.

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Summary of activities

Identified this quarter were

- 13 emerging issues concerning food or the food industry.
- Signals prompting updates to 3 identified emerging risks.
- 44 signals that did not meet the requirement of being a foodborne emerging risk to human health.

The ERIS Action Forum will decide if they want to undertake actions on these signals or identified emerging issues.

Featured emerging risks and issues

Aichi virus (AiV). Since first detected in 1989, AiV are known to have caused 16 gastroenteritis outbreaks linked to oysters. While this appears infrequent, there is evidence that AiV may be one cause of undiagnosed gastroenteritis. Studies in several countries found that a high proportion of each study population had been exposed to AiV, suggesting that many infections might be mild or asymptomatic. AiVs are excreted with faeces from infected people, are relatively stable in wastewater and have been detected in surveys of freshwater and shellfish. Better test methods are already improving what is known about this virus and are likely to clarify the role of food as a vehicle of infection, relative to other transmission pathways.

Glycerol in slush ice drinks. In separate incidents in Scotland, two children were hospitalised with glycerol intoxication after consuming multiple slush ice drinks (slushies) over a short time period. Glycerol (glycerin, E422) is used to prevent slushies from freezing solid and

should be added to food at the lowest possible level necessary to accomplish this effect. The incidents signal a re-emerging risk, whereby current controls have not prevented illness from excessive slushie consumption. The availability of self-serve, unlimited refills to consumers might have contributed. Further work in Scotland will gather data on glycerol levels in beverages.

Bamboo and other plant-based composite materials. The UK Food Standards Agency has launched a call for evidence to determine the long-term safety of food contact materials made from bamboo or other plant-based fillers combined with plastic. Chemical hazards could potentially migrate from the plastic components to food. Long-term (chronic) exposure to these hazards at the levels in contacted food might be unsafe. Evidence gathering and risk assessment are required to ascertain safety. In the interim these products are no longer permitted to remain on the UK market.

Some other observations

- There are multiple concerns over beverages containing caffeine: Products with higher caffeine or vitamin levels, increasing frequency of consumption by adults, consumption by children. This is a re-emerged food safety risk. The risk is being actively managed by FSANZ through the Australia New Zealand Food Standards Code.
- Dry food vending machines and milk kegs in cafés are examples of bulk food dispensing options being rolled out to increase convenience and reduce food packaging use. Good hygiene and regular deep cleaning are important to avoid contamination.
- A survey of consumers in Portugal revealed that younger people were less likely to check food cookware for symbols to indicate whether they could be used for microwaving or freezing foods, or could be washed in the dishwasher. This signals that younger people could be using these containers in unsuitable ways, potentially exposing themselves to toxic substances. The participants were self-selected.

[Link to a caffeine media article \(Stuff NZ\)](#)

[Link to FSANZ caffeine review \(P1056\)](#)

[Link to a milk keg media article \(Stuff NZ\)](#)

[Link to a vending machine media article \(FoodNavigator Asia\)](#)

[Link to consumer survey \(Moura et al.\)](#)

The NZFSSRC member organisations funding ERIS are:

