

**EMERGING
RISK
IDENTIFICATION
SYSTEM**
Enhancing Food Safety in New Zealand

Monthly Brief

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New Zealand
**FOOD SAFETY SCIENCE
& RESEARCH CENTRE**

New Zealand Food Safety
Haumaru Kai Aotearoa

Welcome to Issue 9. ERIS is in year two of a two-year project. Our focus is on upskilling, expanding networks and continuous improvement. We are starting to think about what a long-term system could look like and how it may be funded.

Introducing Pierre Venter General Manager Innovation Services, Fonterra

ERIS Role: Action Forum member.

As part of his wider role, Pierre leads a team that enables world class R&D for Fonterra's innovative product range and continuous application of food safety science to improve the safety and quality of their products. Fonterra funded ERIS to support not only their own, but also NZ's preparedness for emerging food safety risks. One of the benefits of ERIS is how



it fosters collaboration and sharing of information gathered from several horizon scanning platforms with NZ's food manufacturing sector.

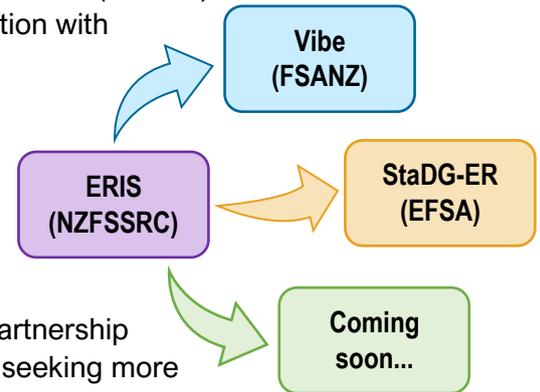
See Pierre's recent NZFSSRC talk: <https://youtu.be/pGcWHQFxpOs>

International connections. "A horizon scanning system should be part of a network of like systems." This is one of the recommendations underpinning ERIS. Just as we are creating a network within NZ, we are also developing links to share information with other food safety emerging risk systems.

Directly, and via the NZFSSRC, we have connected with *Vibe*, a surveillance system for emerging food safety risks within Food Standards Australia New Zealand (FSANZ).

We also exchange information with the European Food Safety Authority's (EFSA)

Stakeholder Discussion Group on Emerging Risks (*StaDG-ER*), which is part of a large emerging risk programme within EFSA's Knowledge Innovation & Partnership Management Unit. We are seeking more international connections.



International relationships are invaluable for identifying emerging food safety risks and understanding the actions being adopted overseas to mitigate these risks. Having an international network of experts to discuss emerging risks with is very helpful when you're not sure if what you're seeing could be signalling an emerging food safety risk, or not.

2020 FSANZ emerging issues report: <https://www.foodstandards.gov.au/publications/Pages/Report-on-Emerging-and-Ongoing-Issues%20-%20Annual-Report-2020.aspx>

May 2022 EFSA StaDG-ER meeting: <https://www.efsa.europa.eu/en/events/27th-meeting-efsa-stakeholder-discussion-group-emerging-risks-stadg-er>

When natural components of foods are linked to chronic health effects. At a recent meeting we talked about chronic conditions, such as cancer or reproductive disorders, where there was evidence that consumption of certain foods increased risk. While food producers and food regulators work to reduce or remove hazards that could contribute to illness, what if the hazards are natural components of foods? Or, what if they form naturally during food preparation, like during home cooking? We are seeing more in-depth studies trying to work out how certain foods could trigger chronic diseases, at the cellular and molecular scale. Usually, not much can be done to manage consumer risk, other than providing information and dietary advice. From an emerging risk perspective, changing dietary patterns provide an early warning of possible future impacts on public health.

The NZFSSRC member organisations funding ERIS are:



Featured emerging risks and issues

Human bocavirus (HBoV) in shellfish. First described in 2005, HBoV causes respiratory illness, mainly in young children. HBoV has also been detected in human faecal samples and in the environment but it is not certain that these viruses cause gastrointestinal disease. Several surveys have also detected HBoV in shellfish.

Chemical migration from substandard silicon moulds. A study in Spain¹ found there were silicon baking moulds being sold that had not been subjected to a final curing step. A standard laboratory test showed that, during baking, unacceptable levels of chemicals could migrate from these substandard moulds into foods.

Potential for adulteration of sunflower oil. Global supplies of sunflower oil are coming under pressure due to the war in Ukraine. This creates opportunities for fraudulent activity.

¹ Asensio *et al.* <https://doi.org/10.1016/j.fct.2022.113130>

Summary of activities, May 2022.

New emerging risks and issues. Nine emerging risks concerning food were identified in May along with an emerging issue for which the role of food was not yet clear, but the issue was considered to be important for the food industry:

Concerns food:

- Mineral oil hydrocarbons (MOAH) in food: Harmonised limits of quantification
- Human bocavirus in shellfish
- *Clostridiodes (Clostridium) difficile* on potatoes
- Chemical migration from substandard silicon moulds
- Potential for adulteration of sunflower oil

- Emerging natural toxins in seafood
- Dietary exposure to organophosphate esters
- Foodborne transmission of *Klebsiella* species
- Foodborne transmission of *Streptococcus equi* subspecies *zooepidemicus*

Might concern food:

- Cadmium in emerging animal fodders

Many of these are likely to be important to New Zealand and briefing notes are being prepared. The Action Forum will decide if they want to undertake actions on these identified emerging risks. Briefing notes sourced from publicly available information can be provided by the coordinators to NZFSSRC members upon request.

Other assessed emerging issues. There were 16 emerging issues assessed during May that did not meet the requirement of being a foodborne emerging risk to human health. A list of these emerging issues is maintained for later review.

Some other observations. For interest, not currently in the ERIS Emerging Risks Register.

- The cause of an international outbreak of hepatitis among children has not been identified. We are watching in case food is involved.
- EFSA will be assessing the risks of plastic food contact materials and are currently prioritising which ones they will review first.
- In anticipation of international standards, the Japanese Government has drafted guidelines for information about expiry dates to be shown for foods sold online.

<https://www.paho.org/en/documents/acute-severe-hepatitis-unknown-origin-children-10-may-2022>

<https://www.efsa.europa.eu/en/efsajournal/pub/7231>

<https://www.foodnavigator-asia.com/Article/2022/05/23/japan-emphasises-expiry-dates-and-allergens-for-new-online-food-rules>

Further information. This brief has been prepared for the NZFSSRC's funding and partner organisations by Nicola King (ESR), with the support of Seamus Watson (ESR) and Kate Thomas (NZFS).

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New Zealand Food Safety Science and Research Centre (NZFSSRC). <https://www.nzfssrc.org.nz/our-work/eris/#/>

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

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