

EMERGING RISK IDENTIFICATION SYSTEM
Enhancing Food Safety in New Zealand

Monthly Brief

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New Zealand Food Safety
Haumaru Kai Aotearoa

Welcome to Issue 11. 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 Paul Blatchford Innovation Manager (Consumer and Health), Zespri

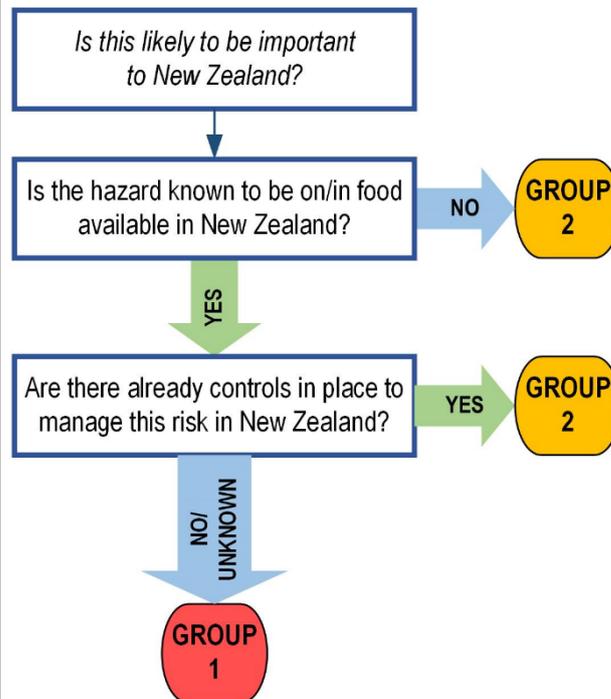
ERIS Role: Action Forum member.

Paul manages the research programme for Health, Nutrition and Food Safety at Zespri, which engages scientists to undertake research focusing on the benefits of kiwifruit to health and wellbeing, and to ensure kiwifruit are delivered safely to consumers in their global markets. Zespri has been a proud member of the NZFSSRC since its inception and benefits from being part of



the ERIS initiative. For Zespri, having a global-facing risk scanning function is essential. A benefit is having ERIS run independently with expert scientific input.

Triage refresh. We have been using a three-step 'triaging' process to decide whether something is an emerging risk that concerns food, and whether it is important for New Zealand ([see Jan/Feb 2022 Monthly Brief](#)). Owing to differences in how the process was being applied we investigated ways to improve it. If something is an emerging risk, and does concern food, it makes it through for further evaluation even if there is some uncertainty. But what makes it important to New Zealand? We decided that if there is information to show the potential hazard is already in New Zealand food, but current food safety activities probably will not manage the hazard, then this was a bit more important and these



become 'Group 1'. The hazards for which there are no data to show they are in NZ food, or there are already controls, fall into 'Group 2'. Nothing is perfect: Looking at emerging risks involves uncertainty. This revised triage is simply another tool we are using to reduce the noise and provide some focus.

Re-emerging risk, or re-minder? Disruption to Easter treats occurred this year when an international outbreak of salmonellosis was linked to chocolates produced in Belgium. *Salmonella*-contaminated chocolate has been previously linked to outbreaks so, while disappointing, it was not new. A second Belgian *Salmonella*-contaminated chocolate incident later in 2022 implicated a contaminated batch of lecithin, a fatty additive used to improve the chocolate's characteristics. The lecithin was made from soybeans and investigations are underway to find out how contamination occurred. In most cases, the causes of chocolate-associated outbreaks are not identified but contaminated soy lecithin prompted a precautionary recall of chocolate in 2006. These events could signal a re-emerging risk but it's probably just a reminder that food safety requires constant vigilance.

The NZFSSRC member organisations funding ERIS are:



Featured emerging risks and issues

Lead in blueberries. Freeze-dried blueberries were subject to a recall in the US after lead was detected above the US FDA's recommended limits. Investigation into the origin of the blueberries found that the country of origin was Lithuania. The issue of lead in blueberries does not appear to be a common food/hazard combination.

Extraintestinal pathogenic *E. coli* (ExPEC). Most foodborne illness caused by *E. coli* occur in the host's gastrointestinal tract. *E. coli* causing illness in sites outside of the gastrointestinal tract are termed extraintestinal pathogenic *E. coli* or ExPEC. There is interest in using genomic analyses to help determine whether food and food animals are potential sources of the ExPEC strains causing human infections.

***Helicobacter pylori* in poultry.** *H. pylori* (formerly *Campylobacter pylori*) is a common cause of stomach ulcers. Although it is thought to be present in most people worldwide, New Zealanders have a lower rate of infection than people in many other developed countries. The common view is that this bacterium is transmitted person to person but the modes of transmission aren't well described. *H. pylori* detection in poultry has led to questions about potential foodborne sources.

Summary of activities, July 2022.

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

Concerns food:

- Mycotoxin and alkaloid contamination in plant-based meat alternatives
- Lead in blueberries
- *Helicobacter pylori* in poultry

Might concern food

- Allergens in powdered silk worm (*Bombyx mori*)
- Extraintestinal pathogenic *Escherichia coli*, (ExPEC)
- Possible food safety issue with tara flour

Many of these issues 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 ten emerging issues assessed during July 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 WHO Director-General has declared "that the global monkeypox outbreak represents a public health emergency of international concern." The Monkeypox virus is spreading via person-to-person transmission. Transmission from humans to animals is possible (e.g. some rodents are susceptible). Current information does not suggest the virus can be transmitted to pets or livestock.
- A review has summarised EU regulatory limits for a range of chemical contaminants in seafood and signalled possible future MRL changes.

<https://www.who.int/director-general/speeches/detail/who-director-general-s-statement-on-the-press-conference-following-IHR-emergency-committee-regarding-the-multi-country-outbreak-of-monkeypox--23-july-2022>

<https://www.health.govt.nz/our-work/diseases-and-conditions/monkeypox-mpx>

<https://doi.org/10.1016/j.foodcont.2022.108978>

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).

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

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

Contact: Nicola.King@esr.cri.nz

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