Discussion and areas for further consideration - Understanding international provision of allergen information

6.1 Strengths of the research

Mixed methods approach: We combined a literature review with qualitative, interview-based research. The interviews were designed to both build upon the strengths found within the literature and address gaps emerging from the reviewed literature.

Systematic process guiding the literature review: Clear protocols were developed with the FSA and our academic and charity advisors to guide the search for relevant literature in two databases (see Appendix A). These were further adapted as appropriate based on the results of early scoping research conducted by our academic advisor (see Appendix B). The revised approach was validated by the FSA before proceeding further with the search, to ensure agreement from each involved party. The two databases used for the search were Web of Science and SCOPUS, which have extensive, international records both from sciences and social sciences. We followed a systematic process for the literature review, guided by PRISMA style of reporting to monitor the number of records included/ excluded at each stage of the screening with clear reasons for exclusion as set out in the search and screening protocol (see methodology for details). Finally, we used the framework developed and recommended by DEFRA to undertake critical assessment of the evidence by rating the quality of the articles in terms of robustness and relevance.

Consistent use of research tools guiding the qualitative fieldwork: A clear set of semi-structured topic guides were produced to guide the interviews with four stakeholder groups: researchers in FHS (n=3), enforcement authorities (n=5), food business operators (n=1) and consumers/patient advocates (n=4). This ensured that different researchers were using the same set of research tools to optimise parity across discussions and mitigate the influence of individual interview styles and approaches.

Extensive geographical coverage: The literature review and our fieldwork cover an extensive range of countries and regions across the world (18 countries or geographical regions), including several records that are not country-specific and thus more widely applicable to the EU or worldwide. It is to be noted that the evidence base does not cover one country that was intended to be within scope, namely Belgium, because there was no legislation or other relevant literature available in English.

Coverage of research questions: The findings from the literature review showed that the search and screening process resulted in a high volume of articles, in particular related to research theme one on legislation and guidance per country, as well as research theme five on stakeholder perspectives on what works, why and for whom. These were also supplemented wherever possible with insights gained from qualitative interviews to strengthen the narrative presented in the report.

Peer-review by FSA and academic advisor: All outputs from this project, from the development of the search protocols, interview topic guides, draft interim and final reports and presentation slides, were peer-reviewed by our academic advisor, Dr Audrey DunnGalvin who is a Lecturer and a Programme Director at University College Cork and also the CEO of Anaphylaxis Ireland.

6.2 Limitations of the research and barriers

Research gaps in literature: There were relatively few results related to research theme three on enforcement process and capabilities or research theme four on non-compliance and consequences. We did try to follow up these gaps through interviews, but it was hard to engage with enforcement officers internationally, so this further limited our findings. Some reasons for this include the relative lack of legislation related to food allergen information provision in the non-prepacked sector, compared with the more widely mandated provision within the prepacked sector. There is also little to non-existent consistent reporting of allergy-related deaths and incidents associated with the non-prepacked sector, limiting our ability to identify trends in the data as a function of legislative changes, business characteristics or other factors.

Availability of literature in English: Further, there was a scarcity of literature published or available in English from certain countries such as Belgium, which was a requirement for inclusion established at the out-set of this project.

Challenges in recruiting stakeholders for interviews: Despite purposive mapping of stakeholders for interviews and wide-reaching sampling and recruitment strategies, we were unable to meet the target of 15 interviews. This is despite a high level of outreach efforts with almost 125 emails sent by RSM along with additional emails sent by our advisor and the FSA team. Two categories were particularly difficult to recruit interview participants for – international enforcement authorities and food businesses within and beyond the UK. The response rates from stakeholders were very low, particularly in contexts where we did not have prior relationships or a history of engagement with the stakeholder.

Tight timescales for the project: An additional barrier came from the fact that the project had tight timescales (as this was primarily a rapid evidence review) which made it challenging for stakeholders who were interested in taking part but unable to respond within the specified timelines.

6.3 Considerations for further research

The overall objective of this rapid evidence assessment was to develop recommendations for the FSA to inform future policy and regulation decisions based on evidence of ‘what works’. The reviewed literature, however, provided limited evidence of improved safety, compliance, unintended consequences, or feasibility of the approaches. As such, we were unable to provide clear recommendations from the evidence. We have instead gathered information on the problems raised for different stakeholders as well as the ideas or potential solutions suggested in the evidence literature that may be associated with improvements in experience and/or effectiveness of allergen information provision in the non-prepacked sector. These are summarised in the table below.

This is not an exhaustive list of potential options to consider, and further research is required to develop other options. Further systematic reviews, evaluations or feasibility studies, which would be required before any potential solution is implemented through changes in legislation or enforcement.

Table 4 Summary of problems raised, and potential solutions suggested in the evidence, triangulated from the reviewed literature and interviews

Problems raised in the research	Strength of evidence	What is suggested that may work
Verification of verbal information is challenging for inspectors Consumer confidence with verbal information in terms of perceived accuracy, consistency and trustworthiness	**High** Peer-reviewed mixed-method studies including large surveys, in-depth interviews, and stakeholder consultations. Also supported by our qualitative interviews.	• Improving or increasing written provision of allergen information • Standardisation of information provision, for example in terms of placement of allergen information and use of symbols, safety statements and precautionary statements
Capacity, time and resource were also common challenges for carrying out inspections for enforcement officers in the UK	**Low** Highlighted in our qualitative interviews, n=5, with UK-based enforcement authorities.	• Address the resourcing gap highlighted by enforcement authorities in interviews (n = 5), potentially by increasing capacity (e.g. through recruitment) or reducing workload (e.g. in terms of required paperwork)

Problems raised in the research	Strength of evidence	What is suggested that may work
Lack of food hypersensitivity/ food allergy awareness or understanding amongst staff in FBOs Poor communication or engagement between FBO staff and enforcement officers and consumers (e.g., language difficulties, inconsistency in information provided) Staff turnover or time constraints can become a barrier to implementing training	**High** Peer-reviewed mixed-method studies including large surveys, in-depth interviews, and stakeholder consultations. Also supported by our qualitative interviews.	• Providing context to FBO s/staff on need for better allergen risk management systems • Better opportunities for food allergen training, particularly if self-paced, with real world examples and simple language • Providing and sharing tools and guidance for businesses (e.g., to create customisable electronic menus, use allergen templates and posters for information, create allergen-free menus) • Proactively asking consumers about allergies and dietary needs • Ongoing training and collaboration opportunities to share good practice within the FBO sector or within enforcement authorities
Not all types of food allergens catered for to the same standard by FBOs, both in terms of differences in regional provision and the perception that some allergens are more serious than others	**Moderate** Peer-reviewed studies including a mixed-method study with a large survey and in-depth interviews, and a literature review. Also supported by our qualitative interviews.	• Better understanding of the differences in allergen information provision in terms of regional differences or across different types of FBOs

Problems raised in the research	Strength of evidence	What is suggested that may work
Inconsistency in interpreting and using PAL statements by FBOs and by consumers Risk assessments are challenging due to lack of clarity on the thresholds of allergen levels that constitute clinical risk	**High** Peer-reviewed mixed-method studies including large surveys, in-depth interviews, stakeholder consultations and systematic reviews. Also supported by our qualitative interviews.	• Introducing regulation or best practice for when to use PAL and agreement on allergen testing methods and threshold levels. • Agreement on how to use PAL (e.g., single, concise statement supported by a symbol) • Improving education for all stakeholders regarding interpretation and use of precautionary labelling