AXA

XL Insurance

The F&B Recall Risk Reality Check

Balancing Macro and Micro Threats to Food and Beverage Production

Contents

Report Introduction

For any employer in the food and drink manufacturing sector, the ever-present risk of product recall is a critical issue that is key to commercial performance, survival and growth. No business is immune to the potential severity of a real-life recall scenario, and no brand is fully insulated from the reputational impact which can explode overnight and can take years to overcome.

As a result, there can be few people with responsibility for food or beverage (F&B) production who would argue against the view that, in a fast-moving world rife with complex connections and delicate dependencies, product recalls represent a growing risk to the immediate and long-term future of businesses across the sector. As a specialist insurer trusted to handle complex risks for multi-national brands, we support our clients to confront and plan for this reality on a daily basis.

Temperature Check

As the industry strives to move on from a turbulent three years in which many producers have been – and continue to be – forced to operate in an environment of perpetual crisis and disruption, it is clear that the sheer number of risks confronting F&B producers presents a major challenge for individual businesses to be joined up internally and aligned on their approach to mitigating risk. While big-picture threats naturally grab headlines and influence strategic thinking, the devil remains in the detail when product quality and safety are concerned.

This report represents a temperature check on the macro and micro issues that are commanding the attention of risk managers across the industry. Our findings are informed by in-depth interviews with a range of executives responsible for business strategy and product delivery for manufacturers in the UK, EU and US. In response to their observations, our technical experts put forward key considerations for managing the implications and maintaining reliable, resilient operations.

Voice of the Risk Manager

Our report and findings are informed by in-depth interviews with a range of executives responsible for business strategy and product delivery for manufacturers in the UK, EU and US.

Executive Summary

- Sourcing and the supply chain are major issues. These continue to be influenced by the Russia-Ukraine conflict; the legacy of COVID-19; and shifting employment patterns, particularly post-Brexit in the UK.

- Changing diets and health trends are affecting demand. Consumers have a greater expectation of transparency around their food and are embracing dietary changes such as vegetarianism and 'flexitarianism', as they seek to eat more healthily.

- Social media/the 24-hour news cycle brings heightened risk exposure. There is now an increased risk of media exposure around crises and issues generally, with many customers now going directly to Twitter or Facebook to raise issues or make complaints. On the other hand, this offers companies the advantage of being able to directly communicate with consumers, therefore, enabling businesses to provide clear guidance about unsafe products and building an online rapport.

- Industrialised farming/increasingly complex food supply systems are changing the picture. The trend for industrialised farming is here to stay. This is driven by consumers' twin (and possibly sometimes conflicting) desires to have access to cheaper, readily available foodstuffs but also to know where those products come from.

- Increased government regulation will affect recalls. The risk of COVID-19 has generally receded and regulators and inspectors are back on-site for visits and audit checks–in some cases unannounced. There is likely to be a significant increase in recalls stemming from regulatory intervention.

- More sophisticated testing techniques may highlight risks. The increased sophistication of testing means a problem can be more quickly and easily pinpointed to a specific facility or source. This can make it simpler to isolate and rectify issues, but also adds to reputational risk.

- Undeclared allergens are a growing concern. The increasing number of allergies in the population worldwide is making the presence of undeclared allergens a key risk. These have been the biggest cause of product recalls over the past five to ten years. Not only is there a risk to human health, the reputational risk of undeclared allergens in food and beverages is potentially hugely damaging to producers.

- Foreign bodies and chemical contamination is less worrying but still a risk. Contamination by foreign bodies is considered a moderate risk, with occurrences less common than microbiological and allergen contamination. Systems can be put in place to pick up accidental foreign body issues, but they remain a risk. Chemical contamination is considered a low risk. But as the recent ethylene oxide issue showed it is not a non-existent risk.
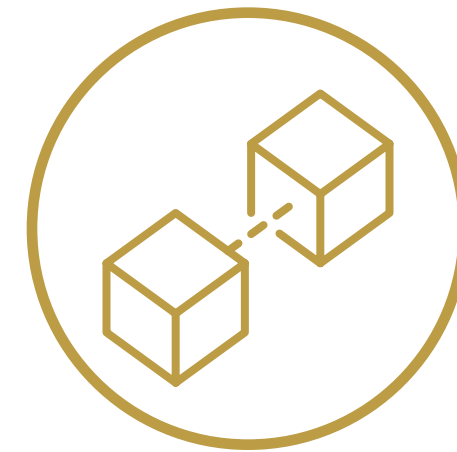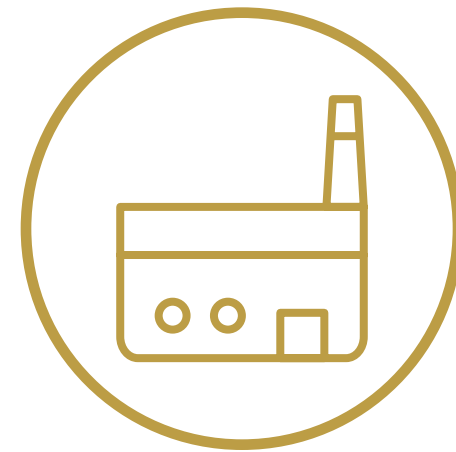
Approach
This report is based on the findings of independent research carried out among executives with responsibility for product recalls and risk management across a range of food and beverage manufacturing businesses. Respondents were based in the UK, Europe and the US and contributed views via a written submission and qualitative interviews conducted virtually .

The insights from these conversations have been supplemented by desk analysis of product recall trends and contributions from AXA XL's recall insurance specialists.

Product journey risk map

The product journey entails certain risks at each point of the journey

Sourcing	Ingredient transportation	Production and manufacturing	Distribution and transportation	End customer

Sourcing
- Risks vary by ingredient type
- Ensuring safe and quality ingredients
- Risks of cross contamination between farms (eg GMO)
- Reliability of supply can be disrupted
- A need to respond to supply issues, change in suppliers
- Food fraud

Ingredient transportation
- Safe ingredient transportation
- 'Catching any issues' with ingredient quality at the door

Production and manufacturing
- Safe practices in production/processing
- Safety practices reliant on workers, many of whom are temporary
- Ensuring a safe environment
- Ensuring correct formulation
- Ensuring correct labelling, in light of line changes

Distribution and transportation
- Safe product storage / risk of cross contamination, pathogens developing
- Ensuring appropriate packaging to ensure food quality and freshness maintained

End customer
- Risks vary by end customer
- Middle aged adults less at risk than elderly and children, or those with health concerns for example
- Growth of allergies worldwide
- Shift in consumer expectations
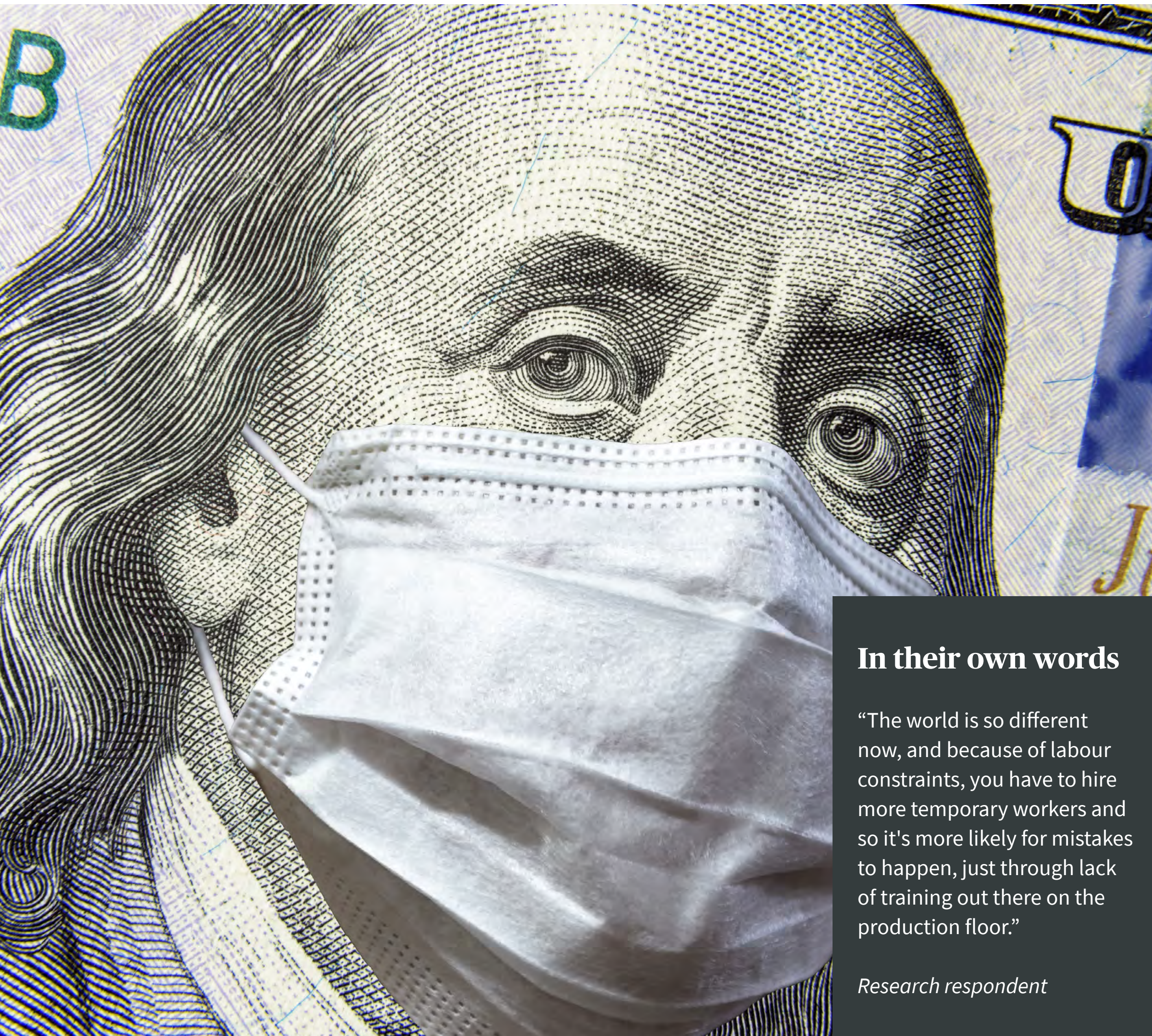
Chapter 1: Key themes shaping the risk landscape

Throughout this report it is useful to remember there are two audiences or perspectives from which we have assessed the key themes and issues affecting product recalls.

The business or strategy-led audience is insurance-driven and focuses predominantly on the implications of recall at a business and financial level. The product safety or quality-led audience is much more concerned with the detailed risks of recall, with a closer focus on the technical issues involved.

Production pressures

- **Sourcing and supply-chain issues**

Both of these areas are perceived as major issues by both audiences. The war in Ukraine and, prior to that, COVID-19 have led to significant disruptions of supply chains, leading to shortages and often price rises as a result. Add into this the increasingly complex nature of industrialised farming and food supply, and climate change creating disruption to crops, and it seems inevitable these issues will remain a concern for the foreseeable future.

Sourcing, in terms of traceability and sustainability, is an increasingly important consideration among consumers. Consumer habits are increasingly health-driven, with changing diets such as a reduction in meat and dairy consumption, moves towards plant-based alternatives and expectations around transparency of supply chains. There is an increasing desire to not only know where food comes from, but what is in it too.

Sourcing and supply-chain issues are an increasing part of the risk landscape, with sourcing in terms of traceability and undeclared allergens a particular concern for product recall. A recent example is the ethylene oxide contamination of a range of food ingredients and additives which prompted a large number of product recalls across Europe.

Allied to increasing consumer sensitivity and scrutiny around sourcing issues is the risk of immediate exposure via 24/7 news media and by the public via social media channels.

In their own words

"The world is so different now, and because of labour constraints, you have to hire more temporary workers and so it's more likely for mistakes to happen, just through lack of training out there on the production floor."

Research respondent

In their own words

"A quality product that is produced safely starts with the entire supply chain, what ingredients are you putting into your products and what's the risk of each one of those individual ingredients?"

Research respondent

■ **Shifting employment patterns and labour shortages**

Again, this is an issue for both audiences in our research. From a business/strategy-led perspective, the US and countries across Europe are experiencing increasing difficulty in recruiting staff. In the UK there has been a tradition for many years of overseas seasonal workers harvesting crops, and in food processing.

In the US, UK, and other European countries to a lesser extent, high rates of staff turnover during what has been dubbed 'The Great Resignation' have also had an impact. COVID-19 led many people to reassess their lives and opt for earlier retirement, part-time working or career changes, with many sectors struggling to fill the resulting vacancies.

In the UK, Brexit is widely accepted as having had a considerable impact on the ability of the food industry to recruit from overseas. This has been acknowledged by the Government and has led to an increased number of work visas for seasonal harvesting, and higher quotas for workers in meat processing, particularly for butchers in the pork industry.

Pressure to increase wages to attract workers, and the recent increase in the UK minimum wage, coupled with significant price rises throughout the supply chain, for products ranging from fertilisers to energy, all add to costs for food producers and processors and ultimately squeezing margins.

From a more product-safety/quality-led perspective, risks arising from worker shortages can include reduced or delayed production of goods, leading to shortages of certain products. An increase in temporary staff (or in 'new' temporary staff, rather than those who regularly return year-on-year) can also increase the risk of product recall issues occurring. For example, mislabelling is more likely to occur with a less stable workforce and as a result of supplier changes due to product shortages.

Malicious product contamination is also a risk. To quote one respondent to our research, "high staff turnover creates opportunities for somebody to come in who is fed up and do something to your product."

Consumer trends

■ **Increasing media exposure and customer sensitivity**

There is now an increased risk of media exposure around crises and issues generally, thanks to a 24/7 news cycle and the rise of social media. Many customers now go directly to Twitter or Facebook to raise issues or make complaints – and of course the news media monitors activity on these platforms that may be relevant to their area of interest.

There is increasing consumer sensitivity and scrutiny, particularly around sourcing issues, and this shows every sign of shaping the consumer mindset for the foreseeable future. As a society we have become much less understanding and tolerant when it comes to waiting for an answer or a solution to the issue raised. Whatever we want, we want it now.

■ **Health-driven trends, changing diets and expectations around transparency**

Health and diet are increasingly strong drivers of customer behaviour. A reduction in meat and dairy consumption, creating a 'flexitarian' diet, with a desire for plant-based alternatives, vegetarianism, and increasingly veganism, are all part of today's dietary landscape.

In light of this heightened attention to diet, there are also greater expectations around transparency in terms of sourcing, traceability and sustainability. Consumers are not only interested in what they are eating but where it comes from and how it gets to them – and increasingly the impact it has on the natural environment.

Consumers are subjecting manufacturers and brands to increasing levels of scrutiny around the claims they make concerning sustainability and traceability – and quickly highlight, often via social media, those businesses they deem to be failing to live up to the claims they make.

■ **Crisis management and the need to respond sensitively and effectively**

For reasons already referred to regarding the impact of media and social media, it has never been more important for food and drink manufacturers to respond appropriately to any media scrutiny or coverage, in particular when it comes to senior management.

And this public response needs to be made sensitively, effectively and quickly to protect a brand's reputation.

In most cases a crisis escalates extremely quickly, which means that a company must act decisively to ensure control. Anyone with a smartphone is now a citizen journalist who can catapult news of a crisis, and a brand, into the public domain almost instantly – and often inaccurately.

Organisations now need to be more prepared than ever for crisis. Are there sufficient resources in place to be drawn upon at a moment's notice, including a practised traceability plan, pre-prepared template holding statements and a trained recall team? Is there an awareness of all stakeholders, both internally and externally, and how to communicate appropriately with them during an incident? Are trained crisis media spokespeople on hand?

In their own words

"We're in a sue-happy society now, so we need to have all our 'I's dotted and 'T's crossed."

Research respondent

Chapter 2: Macro risks

The macro risks facing F&B producers range from pandemics to supply chain hold-ups and shortages, and from brand reputation management to government regulation. The key challenge is understanding the risks that matter and making the right financial/strategic decision.

Pandemic disruption

The Coronavirus pandemic was incredibly disruptive in a multitude of ways including, but not limited to, staff shortages due to illness, extensive testing for the virus, and lockdowns. The legacy of COVID-19 is still exerting an impact - and will continue to do so for some time to come. Furthermore, there's a continued risk of future pandemics from other sources, as illustrated by the recent avian influenza outbreak.

Key risk issues:
Lockdowns and restrictions on the movement of people and goods meant that many restaurants and hospitality businesses had to pivot their business models, often for a sustained period of time, during the worst of the pandemic. Many food outlets, for example, switched to providing home deliveries during times when customers were not able to eat and drink at their premises.

These changed activities meant that risk exposures shifted. Those F&B producers that switched to home deliveries may have had to use different ingredients which may have been stored and used in new ways as their product changed to meet consumer demand, for example. A shortage of personnel, because of employee illness or unavailability caused by the pandemic, meant many firms were operating with reduced numbers of experienced staff, opening themselves up to potential risks and gaps in processes and continuity. Added to that, a shortage of drivers and transportation placed additional challenges on firms trying to supply their goods or to distribute them to consumers.

Retail sales soared as consumers remained at home to eat and drink, and this also put pressure on suppliers, which also were often short-staffed.

In addition, restrictions on the movement of people meant that regulatory inspections also were curtailed. This may have led to certain risks going unchecked.

Risk mitigation:
F&B producers, like companies across all segments, put in place heightened sanitation requirements and supplied employees with protective clothing and equipment to try to stop the spread of COVID-19. Many of these practices remain in place and may have a positive impact on the overall level of health and safety in future.

As we move out of the pandemic we are likely to see an uptick in recalls prompted by lapses in process during periods of staff shortages and the resumption of regulatory inspections and increased scrutiny of processes. F&B companies can take steps to minimise this risk by ensuring their processes are robust and communicating these with employees.

Disruption to supply chains including ingredient shortages

With the world 'waking up' after COVID-19, there has been an upsurge in demand for food and beverage products, leading to disruption in supply chains and in increased costs . In the UK, Brexit has also had an impact as 'frictionless trade' has been replaced by the need for customs declarations and inspections. Climate change will continue to be a major concern, affecting crops and crop yields, as will the war between Russia and Ukraine, impacting grain production.

Key risk issues:
The combination of the COVID-19 pandemic, the Russia-Ukraine war and Brexit has put immense pressure on already complex global supply chains and highlighted how quickly events can have an impact – even if they take place far from home.

The UK's exit from the EU has meant that supplies of some ingredients and equipment are taking longer than before because of administrative delays. This means that some F&B producers are being forced to use substitute ingredients in order to meet production deadlines or are continuing to use outdated machinery and equipment.

The conflict between Russia and Ukraine is also affecting supply of certain ingredients, such as sunflower oil. The lack of availability of these products, and/or the prohibitive cost, will mean that many producers have to use substitute ingredients, which, in some cases, may not have been adequately tested. Inflation too is adding to this picture, with the costs of certain ingredients and materials putting even greater pressure on producers.

The effects of climate change are also highlighting vulnerabilities in some supply chains, with crops and production affected by weather events like floods, drought and wildfires.

Risk mitigation:
Rigorous application of supplier approval processes must be maintained if ingredient sources are switched, even if -or perhaps especially if- this has to happen at short notice. Similarly, Threat Assessment and Critical Control Points (TACCP) and Vulnerability Assessment and Critical Control Points (VACCP) analyses should be applied, especially where there is any potential for food fraud issues.

Industrialised farming, increasingly complex food supply

Farming is becoming increasingly industrialised – and with an increasingly complex food supply chain to match – with foods routinely containing ingredients from many countries around the world. The use of GMOs in food production is well established, but still contentious, and still restricted to just a single crop in the EU. Waiting in the wings is gene splicing, using CRISPRcas9 technology to potentially increase crop yields and quality.

Key risk issues:
The trend for industrialised farming is here to stay with 'bigger is better' appearing to be the mantra. This is driven in no small part by consumers' twin – and possibly sometimes conflicting - desires to have access to cheaper, readily available foodstuffs but also to know where those products come from and how they are produced. This adds to the complexity of supply chains of many food and beverage producers. It's likely that GMOs will be used more widely in food production, particularly if crops continue to be affected by changes in weather patterns.

Risk mitigation:
Food and beverage producers are mindful of the need to understand the processes involved in large-scale industrial farming. And the expertise of risk engineers can be useful here to gain greater knowledge about how farming is carried out and any particular risk concerns that should be mitigated. Risk experts must also keep abreast of current and changing standards relating to the use of GMOs as well as consumer sensitivities in the markets in which they sell their products. Horizon scanning, which can give risk experts an idea of how areas of risk might develop, will play an important role in, particularly since product recall coverage does not apply to latent exposures.

Increasingly sophisticated media and need for effective brand and reputation management

Not only is today's mainstream media more sophisticated, it also functions 24/7. Add to that a very tech-savvy public, with near 100% access to smartphones/the internet, and the risk to reputation has potentially never been greater. The so-called 'golden hour' to respond to concerns raised around a foodstuff or brand has now shrunk to minutes, if it exists at all. This has led to a strong social media monitoring and use element included in product recall training.

Key risk issues:
Today's media environment means that news can spread across the world in a matter of minutes and that messages can be difficult to control. Food and beverage producers need to be in a position to respond quickly both to consumers and the regulator.

Risk mitigation:
Time is of the essence in a company's media response to any recall. Risk experts need to have plans in place to be able to respond quickly if any recall occurs. The media response services attached to product recall coverage can assist here. Product recall clients also have access to training in crisis management and social media, which can form a key part of any response. On the plus side, social media offers brand owners the advantage of being able to communicate directly with consumers - immediately being able to share important product updates.

Increased governmental regulation

Big Government is back with a bang. All major economies, including the US, have demanded, and supported, strong central government action around the pandemic, and this looks like it's here to stay. The European economies, including the UK, are being expected by their populations to take more of a role in labour terms and conditions and wages.

Key risk issues:
Regulators and inspectors are on-site for visits and audit checks – in some cases unannounced. There is likely to be a significant uptick in recalls stemming from regulatory intervention as governments put pressure on regulators to carry out checks.

Risk mitigation:
Many clients have multiple lines of checks and balances to try to ensure they meet regulatory standards.

Advances in science and tech, more sophisticated testing methods

As in all spheres of technology, more and more sensitive, faster, and more sophisticated testing methods are coming on stream. New testing methods can detect contamination, whether microbial or by an undeclared allergen, at much lower levels than has previously been possible. This has the potential to spark product recalls more often, and in response to levels of contamination that would have previously been undetectable. In addition, the advent of whole genome sequencing means that microbiological contamination can now be traced to source.

Key risk issues:
The increased sophistication of testing means that a problem can be more quickly and easily pinpointed to a specific facility or source. This can make it simpler to isolate and rectify issues, but also adds a layer of reputational risk.

Risk mitigation:
Keeping up to date with technical developments through industry bodies will enable F&B producers to know what is scientifically possible, as well as to understand customer and regulatory expectations.

Chapter 3: Micro risks

Micro risks are primarily the concerns of the more product safety/quality-led audience. This audience is focused on technical detail/product safety and quality and is more engaged with the details of product safety as it is a specific part of its remit and responsibilities.

These clients are on the front, focused on the end product and customer. As a result, they are highly engaged in and attuned to product safety issues. Their key challenge is ensuring that business leaders understand the severity of recall risks, and support and implement mitigations.

Microbiological (pathogens)

Microbiological/pathogen contamination is considered a primary threat – and one that isn't going away anytime soon. Pathogens are very common, however, and hard to protect against – and the implications for customers can be serious.

As they can develop from multiple sources along a product's journey, it can be difficult to identify the source. This can be exacerbated by the need to transport products over greater distances, and unstable workforces resulting in inconsistent practices.

Key risk issues:
Microbiolological or pathogen contamination is one of the biggest causes of product recall. The complexity and sophistication of supply chains means it is often difficult to identify strains of pathogens and where they have developed.

Risk mitigation:
Whole genome sequencing is becoming more accessible and can help to pinpoint the source of a problem. On a practical level, rigorous adherence to cleaning regimes, as well as building and maintaining a strong food safety culture, should be key areas of focus.

Undeclared allergens

The predominance of allergies in the population worldwide is increasing, making the presence of undeclared allergens a key risk, and one which is likely to increase in importance in the future. Like microbiological/pathogen contamination, the implications for customers can be very serious – and even potentially fatal, as a number of high-profile cases have demonstrated. And again, temporary/unstable workforces can increase the risk of a recall related to this issue.

Key risk issues:
Undeclared allergens have been the biggest cause of product recalls over the past five to ten years. Not only is there a risk to human health, the reputational risk of undeclared allergens in food and beverages is potentially hugely damaging to producers. And increased consumer awareness of allergens can also mean that the risks are amplified. Undeclared allergens can occur for a number of reasons, including human error in packaging or labelling, for example.

Risk mitigation:
Risk experts must try to be aware of where ingredients are coming from and have processes in place to ensure that products are packaged and labelled safely. Having a good knowledge of the supply chain can help risk experts to have a better idea of where cross-contamination risks might appear, for example. In the factory, strict allergen management is a necessity, as is thorough training of employees – especially ensuring new joiners understand their role in safe allergen control. It's also important to keep a close eye on the declaration of new potential allergens and be able to check for their presence in ingredients and the end product.
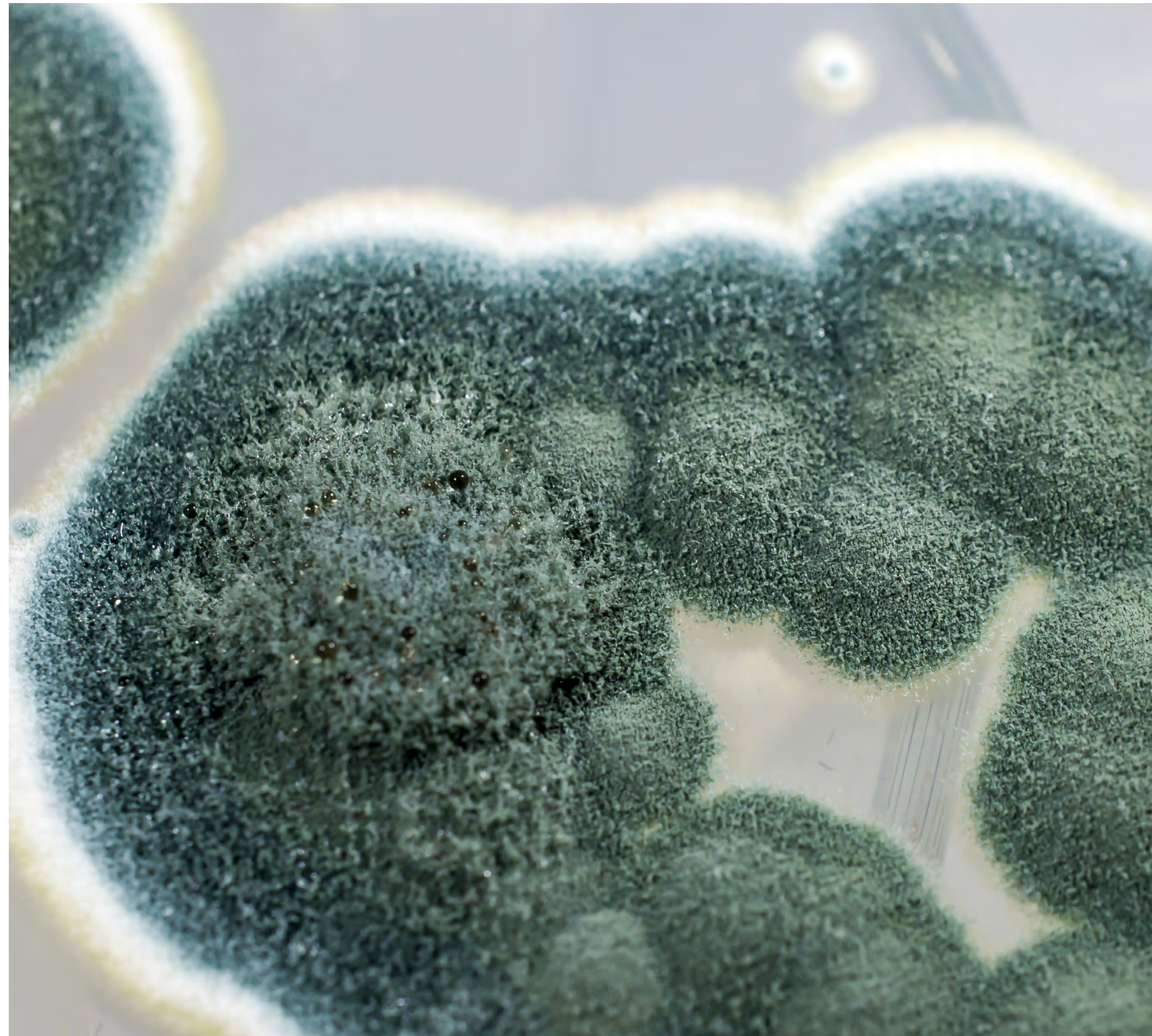
Foreign bodies

Contamination by foreign bodies is considered a moderate risk, with occurrences less common than microbiological and allergen contamination. Systems can be put in place to pick up accidental foreign body issues occurring, but they remain a risk, and there is always the possibility of contamination by a disgruntled employee.

Key risk issues:
Foreign bodies can find their way into food and beverage by mistake – either human error or an equipment malfunction, for example. And they are also sometimes the result of malicious action. With pressure on margins, some facilities may not have been able to keep pace with investment in their facilities and maintenance, potentially increasing the risk of a manufacturing or maintenance error resulting in a foreign body finding its way into a product.

Risk mitigation:
Good maintenance procedures and staff relations can help to reduce the risk of foreign bodies. Advances in testing technology can also mean that foreign bodies are detected more quickly than in the past, reducing the risk of recall.

Chemical contamination

This is considered a low risk – and one that has decreased over time. But as the recent ethylene oxide issue showed, it is not a non-existent risk. Unlike allergens or foreign bodies, chemical contamination is often a chronic rather than an acute risk and this needs to be factored into the risk assessment for any response.

Key risk issues:
Sometimes chemicals that are intended to prolong the shelf life of a product can, if administered in the incorrect dose, inadvertently contaminate a product. In addition, the acceptable levels of certain chemicals vary across jurisdictions. There's also a potential risk of contamination if runoff from a flood, for example, causes high levels of certain chemicals to enter a water supply. Incorrect use of pesticides is another risk area.

Risk mitigation:
Regular testing is key, but it's important to note that it's only possible to test for known potential contaminants, not those that might be unknown. Again, application of VACCP and TACCP protocols is a must.

Recommendations/calls to action/implications for managing recall risks

The last few years have demonstrated more starkly than ever before the need for companies in the food and beverage sector to be ready to react and respond to major disruptions – fast.

The issues caused by Brexit and the Russia-Ukraine conflict have served to illustrate this even more clearly to and underline the fact that risk managers must be prepared for sometimes unexpected or unpredictable events.

As we enter a period of high inflation and the inevitable pressures that will place on the margins of companies throughout the food and beverage supply chain, risk managers are aware of the need to be prepared for disruption and a potential uptick in product recalls.

This report has highlighted some of the key concerns that risk managers in the food and beverage industry will be keeping an eye on over the coming months and years.

Product recall coverage cannot be the solution for all of these potential risks, but developing a strong understanding of the supply chain and the potential issues that could occur up and down it, can help risk managers to more robustly plan for disruption and put in place plans to recover swiftly and successfully should issues occur.

AXA XL Product Recall

AXA XL offers a suite of product recall insurance options. Coverage is available for a broad range of food and non-food companies. AXA XL helps businesses react and recover quickly if they need to recall a product because of a fault or contamination. We work with key consumer sectors including automotive, consumer products, pharmaceuticals, food and restaurants. As well as covering recall costs, we can also provide expert crisis management advice and consultancy if needed.

Why choose us
- We're part of the No. 1 P&C commercial lines insurance platform*
- We offer a leading claims service
- We can offer global cover supported by local knowledge and experience
- Our strength and capacity allows us to be flexible, tailoring cover to fit client needs

*Based on revenues for AXA XL and AXA GI commercial business combined.

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