

# Comparing management approaches to Health & Safety and Food Safety in the Food System: strong alignment or clear blue water?

## Authors

Denis Treacy, Culture Compass.  
Chris Gilbert-Wood, CGW Food Tech Ltd.  
Andy Kerridge, Wyvern Food Solutions Ltd.  
Louise Manning, Royal Agricultural University  
Rachel Ward, Exponent International

## Summary

This article considers the management approaches to designing and adopting a management system to ensure the health & safety of personnel and visitors to a food premises and comparing these to the processes used to develop an effective food safety management system. In some organisations the management systems for health & safety and food safety are distinct and managed separately, whereas in other organisations there is integration of practise and processes in an overarching management system that provides both shared learning and cross-competencies. The management of both health & safety and food safety can only be realised when there is appropriate strategic leadership, an enabling organisational culture and the daily behaviours at all levels of the organisation support a positive and collaborative environment. A failure to deliver this objective can lead to increased organisational risk across all functional areas.

## UK Regulation

The Food Safety Act 1990 defines clear responsibilities for all food businesses to ensure that they do not include anything in food, remove anything from food or treat food in any way which means it would be damaging to the health of people eating it. The food businesses (food business operator or FBO) must serve or sell food that “is of the nature, substance or quality which consumers would expect,” and the food must be labelled, advertised and presented in a way that is not false or misleading. The Food Safety Act 1990 is focussed on ensuring FBOs consider the things they shouldn't do, for example,

- Don't include anything in a recipe which should not be there.
- Don't serve anything unexpected or damaging.
- Don't falsify labelling or mislead consumers.

Food safety legislation requires FBOs to alert regulators when they have identified harmful or unsafe food which has been released into the supply chain and there is a threat to consumers. Depending on the systems that the FBO has in place this could be a real-time or largely retrospective activity.

The Management of Health and Safety at Work Regulations 1999, and Health and Safety at Work Act, requires an FBO to

- Provide and maintain safety equipment and safe systems of work.
- Ensure materials used are properly stored, handled, used and transported.

- Provide information, training, instruction and supervision - ensure staff are aware of instructions provided by manufacturers and suppliers of equipment.

Health & safety legislation also requires FBOs to alert regulators if there is an incident that has led to reportable injuries, but additionally requires the reporting of breaches of health & safety legislation that would have been likely to have caused injury and therefore conditions which may give rise to future injuries. This is a key point of difference between food safety regulatory requirements and those for health & safety.

Health & safety legislation requires the FBO to ensure the provision of conditions that give rise to safe working environments, detailing how workplaces should be designed and managed to protect people who are in those areas (workers and visitors) and prevent harm. These conditions include:

- Adequate and clean lighting, heating, ventilation and workspace.
- Staff facilities, including toilets, washing facilities and refreshment.
- Safe passageways and working areas i.e. to prevent slipping and tripping hazards.
- Provision of adequate and appropriate personal protective equipment.
- Requirements for appropriate manual handling.

The information or guidance given by the Health & Safety Executive, has a specific tone with a focus on structure, preparation and risk avoidance. There are clear imperatives within the regulatory requirements designed to reduce risk, which will be covered later.

Food hygiene legislation follows a similar approach requiring FBOs to comply with 'conditions' that permit good hygienic practices by following general hygiene requirements laid down in Annexes; adopt certain hygiene measures and put in place, implement and maintain permanent procedure or procedures based on hazard analysis critical control point (HACCP) principles to ensure provision of hygiene conditions for food production, processing and distribution. Various conditions are addressed such as facility layout, design, construction, siting and size of food premises to permit adequate maintenance, cleaning etc.; adequate number of wash basins with hot and cold running water; suitable and sufficient means of natural or mechanical ventilation; adequate natural and/or artificial lighting etc.

### **Role of Functional and Operational Management**

Quality/Food Safety/Technical Managers don't make the food products themselves or implement the food safety management system. Health & Safety Managers don't operate machinery. However they all facilitate safe working practices, support businesses to set targets and objectives and ensure compliance with them.

Product quality and **Food Safety Objectives** normally target resources to meet specifications and reduce defects and are set for the Quality/Food Safety/Technical Manager to manage and facilitate delivery and to identify weaknesses and vulnerabilities in the system, implementing appropriate preventive or if necessary, corrective action.

**Health & Safety Objectives** are normally developed to target and reduce incidents and are set for all responsible roles in a location. The objectives for the Health & Safety Manager are to identify the gaps and facilitate the training and equipping of site staff accordingly.

When considering the key functions of food safety and health & safety management, there is much that these two functional entities have in common. This provides a rationale for the practice of bringing them together in one integrated function under a Governance (strategic) and Compliance (operational) umbrella. Many FBOs find parallels in the need to demonstrate individual, management and organisational competencies in areas such as:

- Risk assessment and hazard analysis.
- Developing formal risk management systems that are appropriate to the risk and are supported by sufficient resources.
- Training and development programmes.
- Supporting positive compliance cultures in the workplace.
- Improvement programmes and optimisation of capital spend on infrastructural controls and resources.
- Development of performance measures, strategic objectives and associated target setting.
- Monitoring and verification activities including auditing, preventive and corrective actions and appropriate follow-up processes.
- Incident investigation and shared learnings

Exploring the opportunities for combining the competencies of both functions to deliver a more mutually robust framework for the protection and prevention of harm to both employees, visitors and consumers requires a design approach to determine what an integrated system would look like. The prevention and protection experience of managing both Food Safety and Health & Safety demonstrates both the natural alignment opportunities and also the different ways of driving performance and outcomes in each area. The growth of QEnSH (Quality, Environment, Safety and Health), SHEQu (Safety, Health, Environment and Quality) and **SQSE** (Safety, Quality, Security, and Environment) functions within a food organisation are testament to a growing alignment and integration of corporate risk management systems.

### **How do the approaches differ and are their synergies of combining the roles?**

When comparisons are drawn, the regulations governing Health & Safety consider risk with a much broader scope and a focus on responsibilities. Guidance is more structured and has a much greater focus on the capabilities of competent persons, the assessment of risk and the creation of safe work environments. Health & Safety regulations outline that the most senior person in a location, e.g. the chair of any health and safety review body or committee, should appoint responsible persons to take the lead with health and safety. A responsible persons' matrix should be in place to ensure members of the location leadership team have direct responsibility for ensuring adherence to reviews, timely closeout of any identified management gaps, and deficiencies which if not addressed will increase risk, and effective preventive and corrective actions. These matrices are relevant to the location and activities conducted.

The responsible persons' matrix does not require the supervisor to be 'qualified' in identifying and determining the risks associated with the chosen elements, although all members of leadership teams are encouraged to have some basic Health & Safety overview training,

merely to ensure the review and actions processes are in place. This is a governance role including chairing reviews, ensuring audits are conducted, gap closure, capital resources to ensure legal compliance. This creates the context in which Health & Safety is embedded as a fundamental element of operating, and not particular to a single function. Here the Health & Safety lead in a specific area is the expert practitioner, who takes legislative requirements and translates them into application for the business to action. It is however the businesses responsibility to ensure governance, action the requirements and set objectives within the roles and deliverables of the leadership team.

Considering this same concept for Food Safety, the HACCP team is sometimes led by the most senior person on site, ably supported by their expert practitioner, the Quality or Technical Manager. More often, it is the role of the Technical, Food Safety or Quality Manager expert practitioner to lead the multidisciplinary HACCP team. If key external technical representatives are present in an organisation's HACCP team, together with members of group functions such as HR and procurement, they must fully appreciate and understand food safety risk and the impact of change of people, materials or equipment on food safety controls to be effective.

If a Health & Safety approach was applied to Food Safety we would also see critical risk elements such as microbiological and chemical hazards, allergens, pest management, physical foreign matter, new product change, all set in a matrix with both a Lead and a Deputy Responsible Person assigned who have the relevant technical competence and responsibility for ensuring identified areas of non-compliance and vulnerability are actioned. This is rarely seen. Food safety competence is often held by only one or two individuals per site - who then direct the organisational activities of others who may have little or no technical competence despite being the practitioners who lead their work areas.

### **Capital Investment**

The capital requirements in site food safety investment plans are often reactive, driven by a non-compliance from a customer, third party or self-audit focussed on one product or process. Changes to legislation will also drive investment programmes. Capital investment in ensuring health & safety compliance would see investment directed at those areas where there is legal non-compliance or identified highest overall site risk.

This could create a problem if resources are limited...“If we had two holes in the roof and only had the resources to fix one, would we fix the one that the retailer audit had seen and logged, or the one creating the biggest risk to the product or personnel?”

### **Recording & Reporting**

Health & safety legislation requires FBOs to formally report any accident which involves an injury resulting in loss of ability to work. Businesses are required to keep an accident book, recording every event in which an employee, contractor or visitor has an injury of any kind. There is also a requirement to alert for a 'Dangerous Occurrence' and event which may have resulted in serious injury, but which did not actually occur. The food safety equivalent would be a major contamination event which was detected and addressed so that affected product did not leave the control of the FBO. No alerting of such an occurrence is required and records may only be held for review or training purposes.

An area of particular expertise under health & safety guidance is the investigation of incidents. Investigations must be documented, detailed and overseen by senior managers on an escalating level, with the more serious being reviewed by the Site Lead (most responsible person and chair of the Safety Committee) before being closed out, usually within a maximum of 9 days from the event. Formal investigation training is part of the competency suite of those with roles which include investigating in their scope, ensuring that any persons given the responsibility for investigating accidents, incidents or dangerous occurrences are trained and competent to do so.

Such an approach is not common practice when looking at food safety. However applying a similarly formalised approach to the investigation and closeout of food safety incidents, accidents or dangerous occurrences would ensure that the genuine 'Non Repeat' root cause preventive actions would be successful more often, together with the formal measurement and tracking of such events as a Key Performance Indicator (KPI) of food safety competence. Examples of two production incidents - one food safety and one health and safety – are described in Box 1 to illustrate the differing approaches commonly taken, and both the impact and the potential harm the sentencing guidelines would associate with these example incidents.

**Box 1: Comparison of production incident examples**

<b>Food Safety</b>	<b>Health &amp; Safety</b>
<p><b>Allergen cross contamination</b> Product flow cross-contamination leads to an undeclared allergen in non-allergen product</p>	<p><b>Finger nip incident</b> Packer's finger trapped between two converging conveyors</p>
<p><b>Impact</b> Incident identified, product controlled No consumers impacted.</p> <p><b>Potential Impact</b> Significant risk to hypersensitive at-risk consumers. <b>Potential harm category 1<sup>1</sup>.</b></p>	<p><b>Impact</b> One operator, minor injury.</p> <p><b>Potential Impact</b> Further minor injuries to other staff <b>Potential harm category 3 or 4<sup>1</sup>.</b></p>
<p><b>Action</b> Clean, verify cleaning, QA sign off &amp; <b>restart</b>.</p> <p>Look to manage stock or product to recover costs, re-package, relabel, overstock.</p> <p>Worst case scenario - organise products to be sent to landfill. If retailer branded product, potentially inform retailer.</p>	<p><b>Action</b> Shut down the line, lock off and take out of service. Effect guarding modification. Brief all employees on shift and inform all line managers of the incident. Check line is safe, sign off at FGM or site lead level, together with competent HSE practitioner &amp; <b>restart</b>.</p> <p>Full inspection of all conveyor systems for similar risk, Provision and Use of Work Equipment Regulations (PUWER) gap assessment. Stop, lock off and take all subsequent equipment at risk out of service until guarding modified.</p>
<p><b>Investigation</b> Follow up root cause analysis.</p>	<p><b>Investigation</b> 3 stage report by competent, training line manager, witness statements, photographs, medical report. Timebound response 3 days.</p>

<sup>1</sup> UK Sentencing Council Health and Safety Offences, Corporate Manslaughter and Food Safety and Hygiene Offences Definitive Guideline Effective from 1 February 2016 <https://www.sentencingcouncil.org.uk/wp-content/uploads/Health-and-Safety-Corporate-Manslaughter-Food-Safety-and-Hygiene-definitive-guideline-Web.pdf>

	Follow up review by Area or functional manager - Timebound 3 days Final Review by site lead - Review findings, agree actions, release capital for major modifications
<b>Closeout</b> Modify line process documents as needed, Re-train staff. Review at management review meeting.	<b>Close-out</b> Video reconstruction of incident shared on-line with other locations, advise procurement of risk and update secondary guarding specifications for all new equipment purchases.

## Lead vs. Lag Measurement

### ***“Target failure and you fuel a negative culture.”***

Experience has often shown that food safety risk management, and indeed product quality success measurement, have focussed on the reduction of failure, using consumer complaints, foreign body complaints, retailer rejections, product withdrawals or recalls, pest control or other audit non-conformances as the basis for action planning. This can also be said for health & safety with fail measures such as total and lost time accident rates, reportable accidents, accident severity rates.

Setting targets within objectives to reduce all such measures may drive a focus on the measurement itself – with organisational resources and energy used to argue how severe an accident was, whether an audit non-compliance was justified, or if a consumer complaint was of the consumers’ own making.

Thinking differently about what is measured vs what is set as a target has been used very successfully in the food industry to drive a more positive focus on risk reduction.

**“Don’t set targets to reduce the mice, set targets to reduce the food available for them”**

A risk reduction approach should identify the conditions that indicate the risk management capability of processes, production areas and activities, and set targets to improve or reduce them. If we consider identifying the risk prospects for both health & safety and food safety, then we are able to focus on the opportunities for issues and set targets to positively improve them - as an increasing positive value. For example, setting targets for the identification of trip hazards in the workplace for health & safety risk prevention, or setting targets for uncleaned equipment, poorly stored utensils, unlabelled rework material, and damaged personal protective equipment (PPE) for food safety risk prevention.

Targeting the increasing identification of issues, together with their removal, drives a far more positive energy for the reduction of risk and the transformation of workplace behaviour.

## **Repeated behaviour to deal with potential failure drives improved performance**

***“Fear of capture or failure, may drive a short term response, but it will never change a culture”***

The culture within any given organisation, location or team is driven by the repeated daily behaviours of the team, and more often set by the leader of that group. In order for an environment to be controlled, the daily conduct of the group needs to reflect the requirements for any aspect to be kept in balance. For conditions and controls to be met and effective, the daily actions must match the documented conditions, and operate within an

environment that positively promotes potential issues to be called out and the actions to address them. Otherwise the conditions and controls become invalid.

In order that understanding is completely tangible, the outcomes and consequences of risk being realised together with the impact of incidents needs to be clear, not just the rules to govern and the penalties for failure. Training should raise, and maintain as current, the competency and understanding of the risk and the purpose of the control routines, to enable the ability to recognise unsafe or hazardous situations. Full engagement takes a further step, by associating consequences with both personal and emotional examples, to ensure the organisation, team and each individual are fully aware of what the threat is and its impact.

Once this is established, then non-compliance to a routine or disrespecting of controls becomes a choice, not a misunderstanding, for example, "I chose to put consumers at risk, or to allow myself to go deaf". The action for the organisation is then to remove outlying performers in order to reduce the risk of non-compliance.

Another fundamental for success in delivering predictable and repeatable outcomes is to engage with all internal and external stakeholders, to ensure mutual understanding of risks. Health & safety committees require engagement from employee unions, embedded contractors and other groups which represent those at risk. Food safety committees do not engage in the same way and are often viewed as a technical responsibility rather than an overall organisational accountability. For food safety similar external engagement would include sharing threat and risk assessments with materials suppliers and making such understanding part of the terms and conditions of business. Requirements for sharing of change, circumstances or conditions which may increase risk must form part of the contract with suppliers. The example for health & safety is to create controls, supervision of inductions that condition the behaviour of contractors entering a location, such that they align and act in accordance with the safe practices of that location and specifying criteria to plant equipment suppliers to ensure operator safety is assured for the intended use in situ.

### Box 2: Understanding the full impact of non-compliance

<p><b>Food Safety</b></p> <p>"Ensure you follow allergen controls as you have no idea who will be eating this product or how vulnerable they may be."</p>		<p><b>Health &amp; Safety</b></p> <p>"Failure to wear your ear defenders will result in disciplinary action, or alternatively, wear your ear defenders so in years to come, you will still be able to hear your grandchildren calling you from the garden."</p>
---	---	---

Simply reducing risk will always reduce a business's liabilities, its disruptions and increase its reliability - which has a financial resilience impact that insurers can recognise and qualify, and which customers can be reassured by.

In general, health & safety management is a business-wide activity driven by legislation and regulators. This is not always true of food safety. Food safety looks to reduce risk of failure and introduces controls to avoid their occurrence, with the success of these procedures being measured by failures or indications that the food safety risk management system has failed. Health & safety seeks to positively identify potential risks and eliminate them before the risk management system fails, which is a more proactive approach. Food safety practitioners and

senior management in the food industry have much to learn from looking at the way health & safety is managed, led and regulated in the UK.

## **References**

The Food Safety Act 1990

The General Food Regulations 2004

The Food Safety and Hygiene (England) Regulations 2013

Regulation (EC) No 178/2002 General Food Law

Regulation (EC) No 852/2004 Hygiene of foodstuffs

Regulation (EC) No 853/2004 Hygiene rules for food of animal origin

Management of Health and Safety at Work Regulations 1999

Health and Safety at Work Act 1974

UK Sentencing Council Health and Safety Offences, Corporate Manslaughter and Food Safety and Hygiene Offences Definitive Guideline Effective from 1 February 2016

<https://www.sentencingcouncil.org.uk/wp-content/uploads/Health-and-Safety-Corporate-Manslaughter-Food-Safety-and-Hygiene-definitive-guideline-Web.pdf>