Food Standards Agency
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Annual Report of Incidents 2011

Foreword

The Food Standards Agency has managed more than 12,000 food incidents of varying complexity and nature since we were set up in 2000. The case studies in this report provide examples of the incidents handled during 2011 and also illustrate the work that contributed to meeting the FSA's overall strategic objective of safer food for the nation.

The FSA plays a key role in protecting consumers from eating unsafe food. This involves leading the government response to food contamination incidents and increasingly being part of the cross-government response to wider national incidents – such as flooding, fires, chemical leaks and oil spills – that call for advice on food safety.

Everything we do to tackle incidents – whether at ports, during production or in shops – supports our strategic outcomes of ensuring that food produced, sold or imported to the UK is safe to eat.

For the second consecutive year, the number of incidents increased noticeably. No single reason has been identified for the increasing number of reported incidents. Instead, we believe a combination of factors, including better reporting and monitoring, are behind the upward trend.

The case studies in this report demonstrate that our investigations do give us insight as to why certain types of incidents – such as those relating to allergens and pesticides – have increased. The case studies also show how a day's work might involve assessing how an event on the other side of the world has an impact on the UK food chain, or explaining to UK consumers what the risk is to them from foodborne disease outbreaks abroad. This year there have been a number of 'high level' incidents that have required us to be part of an international response. Incidents from abroad are a risk and in 2011, the principle sources were India, China and Bangladesh.

Incidents demand a considerable amount of our resource and effort. We're always looking to improve the way we operate in order to protect the consumer and give best value to the public. This year, as in previous years, we carried out incident reviews and

exercises with food business operators, local authorities and other stakeholders to learn lessons for the future and embed further good practice into our ways of working. We also reviewed our Incident Response Protocol.

To improve incident handling and partnership working, we continued to provide training workshops to local authorities. We continue to receive crucial intelligence from local authorities and others on food fraud which helps us piece together the jigsaw and enable local authorities to bring about prosecutions.

2012 is of course Games year. We want the positive impact of the Games to resonate for years to come. Throughout the Olympic Games we will work to ensure food in London and other venues is safe to eat. Our continued collaborative working with other organisations will be essential in achieving this.

Our online incident report form makes it easier than ever for local authorities and food businesses to notify us of incidents, which is vital, because we know many go unreported. We hope this annual report encourages you to notify us promptly of both incidents and of any other potentially useful intelligence you may have. This will enable us to act swiftly to protect the public and the food industry, ultimately increasing consumer confidence in food safety.

Tim J Smith
Chief Executive
Food Standards Agency
May 2012

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1 Executive summary

In 2011, we were notified of and investigated 1,714 food and environmental contamination incidents in the UK. This was 209 more than the number of incidents investigated in 2010. Where appropriate, action was taken to ensure consumers' interests in relation to food safety were protected.

Notification of an incident can be received from a variety of sources, including government departments, organisations and a wide range of businesses. The top three reporters of incidents to us in 2011 were border inspection posts (426), local authorities (297) and fire services (246).

In addition to the incidents that get reported to us, we will also from time to time receive food complaints from consumers who may have suffered food poisoning, or found food on sale past its use-by date. Investigation of isolated complaints of this kind is the responsibility of local authority food enforcement officials and as such we will promptly forward the complaint on to the relevant local authority to investigate. In contrast, where a foodborne illness outbreak has occurred, we will be involved, working with key stakeholders to isolate the source of the outbreak and ensure that contaminated food is seized and promptly taken out of the food supply chain.

The three largest contributors to the total number of recorded incidents in 2011 were:

- environmental – 21%
- natural chemical contamination – 17%
- microbiological contamination – 16%

In 2011 we investigated seven 'high' level incidents. We define high level incidents as severe, complex, widespread and likely to generate a high level of concern in public and media perception of the issue. Further details regarding two of these high level incidents, the Fukushima nuclear emergency and the *E. coli* O104 outbreak in Germany and France linked to fenugreek seeds from Egypt, are contained in case studies 1 and 3 respectively. A full list of the high level incidents in 2011 is included within the Statistics section (Appendix 1).

Risk assessment, management and communication lie at the heart of the Agency's incident response protocol. The Agency works in partnership with enforcement authorities, food business operators and other key stakeholders in order to manage incidents proportionately. Our decisions are science and evidence-based, putting the consumer first.

Action taken by us to protect consumers in relation to food safety included issuing 59 alerts and 47 information notices to local authorities. All our alerts and information notices are published on our website. We also sent 507 notifications to the European Commission, via the Rapid Alert System

for Food and Feed (RASFF). The RASFF portal is an effective tool to exchange information about measures taken when responding to food and feed incidents.

In addition to the upturn we have seen in incident reporting, we have also experienced a marked increase in the amount of food fraud intelligence supplied to us by local authorities and others. In 2011 our Food Fraud Team entered approximately 1,400 records on the Food Fraud Database, up 50% on the previous year. This intelligence is fed into our computer system and helps us to build up a coherent picture of fraudulent activity across the UK, which is then fed back to food enforcers to assist them with their ongoing investigations.

To test our incident procedures in conjunction with other similar arrangements, we routinely participate in cross-government emergency exercises, such as Exercises Nightshade and Larkspur in 2011. Outputs from our incident/exercise reviews may result in revisions to our incident procedures, in order to deliver a more efficient and consistent approach.

In the run up to the London Olympics, in 2012 we will be taking part in a number of Olympics related emergency exercises to test our levels of preparedness, including our communications networks with LOCOG, food businesses, local authorities and other government departments to ensure that we are all ready for the unique food safety challenge that the Games represent.

During 2011, our systems for the detection of potential new and re-emerging risks to food safety were finalised and are now operational. These systems will build our knowledge of the strengths and weaknesses within the complex web of global food chains that exist today, thereby enabling us to make predictions about potential future food safety risks that we may face. By targeting our research and surveillance activities at these weaknesses, we will develop a better understanding of when, why and how incidents occur. This in turn will support our policy making and enforcement activities whilst helping us to identify more effective ways of preventing future food safety issues.

We are always looking to improve our incident response capability. Planned developments to our incident response systems in 2012 include improvements to our online incident report form to make it easier for stakeholders to report incidents to us. In 2012 we will also be completing our IT project, designed to link our incidents database with the emerging risks and food fraud databases, to create an 'intelligence network'. This will improve our capability to store, manage and search information and intelligence. In addition, we will continue to analyse our incidents' data to help us identify new and re-emerging risks.

2 What is an incident?

An incident is defined as:

'Any event where, based on the information available, there are concerns about actual or suspected threats to the safety or quality of food and/or feed that could require intervention to protect consumers' interests.'

Incidents fall broadly into two categories

- Incidents involving contamination of food or animal feed in the processing, distribution, retail and catering chains. These incidents may result in action to withdraw the food from sale and, in certain circumstances, to recall, alerting the public not to consume potentially contaminated food.
- Environmental pollution incidents, for example, fires, chemical/oil spills, radiation leaks, which may involve voluntary or statutory action (such as orders made under the Food and Environment Protection Act 1985).

3 What is our role?

Our role is to protect consumers from eating unsafe food. A key part of this work involves investigating food and environmental contamination incidents to determine whether there are any food safety implications and then, where appropriate, take action to safeguard the public.

Where the scale and complexity of an incident is such that some degree of government co-ordination and support is necessary, a designated 'lead' government department will be responsible for the overall management of the response. FSA are the lead government department for widespread accidental or deliberate contamination of food and feed. In addition, we have a key supporting role providing food safety advice in relation to a range of other environmental incidents, such as chemical spills, oil leaks and large fires. We also have a responsibility for ensuring that any clean-up operation following an environmental contamination incident takes account of food safety issues.

We have incident teams operating from our offices in Aberdeen, Belfast, Cardiff and London, to deal with incidents in Scotland, Northern Ireland, Wales and England respectively. Our four offices work together closely and this is especially important during UK-wide incidents where a joined-up response is essential to ensure the incident is rapidly investigated and action is taken promptly to protect consumers. Our incident response may also involve partnership working with a range of other government departments, agencies and trade bodies in the UK and elsewhere.

Where the severity of the incident has led the police to set up a strategic co-ordinating centre or gold command,[1] we may send staff to that centre, or act through another organisation present at that centre. We may also provide representation at outbreak control team (OCT) meetings, during a foodborne illness outbreak.

[1] For major emergencies, an off-site gold command will normally be set up, for example at the local police headquarters. The group will comprise senior officers from the emergency services, senior managers from local authorities and other organisations involved in the response.

4 Why and how should you report an incident?

By reporting incidents to us at the earliest opportunity, we can work together to minimise their impact. Food business operators have a statutory obligation to report incidents. European legislation[2] specifies the general principles and requirements of food law, establishing the European Food Safety Authority and lays down procedures in matters of food safety.

Food business operators are required, under Article 19 of Regulation No. 178/2002, to inform the competent authorities where they have reason to believe that a foodstuff that they have imported, produced, manufactured or distributed is not in compliance with food safety requirements. In the case of the UK, the competent authorities are the Food Standards Agency and the food authorities (local and port health authorities).

Under the Food Law Code of Practice[3], local authorities have a requirement to notify us of food incidents. The code of practice provides instructions and criteria that food authorities should have regard to when engaged in the enforcement of food law. Food authorities must follow and implement the provisions of the code that applies to them.

Local authorities regularly undertake inspections of food premises and sample products from manufacturers, wholesalers and retail outlets. Where breaches of food safety requirements are identified that involve concerns about food in the food chain, the authority will, where appropriate, contact the Incidents Team.

Both industry and local authorities can report incidents to us online. The online report form is available on our website at: food.gov.uk/incident-report-form

Other organisations (for example, the European Commission, UK agricultural departments and environmental agencies) also have procedures in place for notifying us in the event of an incident and likewise when we find an issue that affects or could affect other member states or third (non EU) countries we notify the Commission through the RASFF system.

[2] Regulation (EC) No. 178/2002 of the European Parliament and of the Council of 28 January 2002 ('the Regulation')

[3] We publish this document, which provides instructions and criteria to which local authorities should have regard to when carrying out their food law regulatory and enforcement duties

5 Key work areas

Data Analysis Project

Work on the Data Analysis Project (DAP) continues. This project was set up to carry out a detailed examination of all the incidents data we hold, going back to our inception in April 2000. Apart from enabling us to produce this report and all our annual reports of incidents since 2006, the data collected from this project is used to inform policy and delivery and feeds into our emerging risks work.

Emerging risks

The Emerging Risks (ER) programme aims to deliver our strategic plan objective: 'safer food for the nation'. The programme's main priority is to:

> *'...increase horizon scanning and improve forensic knowledge, and intelligence on, global food chains to identify and reduce the impact of new and re-emerging risks...'*

We define an emerging food safety issue as a health risk to consumers resulting from either:

- a totally new and unexpected hazard or threat, or
- a known hazard or threat which is increasing in frequency of occurrence or severity

Methods for detecting potential emerging risks were finalised during 2011 and are now fully operational.

These include:

- *Incident Trend Analysis* – statistically defined baselines have been set for each incident category, allowing us to predict the number of incident reports expected in each category. On a monthly basis the actual numbers of each incident type are compared to the predicted profile and any variances or exceptions are flagged up for further investigation.
- *Global Chain Analysis* – global chain analysis involves assessing and mapping potential risks associated with the individual processes used to manufacture food products. By understanding the features and attributes of each chain, we can look for any unexpected changes that may represent early warnings of new issues enabling us to take early mitigating action.

Root Cause Analysis

Analysis of food safety incidents has shown that certain types of incident seem to regularly recur. This suggests that the corrective actions taken are not always sustainable or appropriate and are therefore not providing long-term preventative solutions.

For instance, if as the result of an investigation, generalised recommendations such as *'...remind the operator to pay more attention...'* are made, then it is probable that the basic causes of the incident have not been identified and further investigation is

required to determine the most effective preventative actions.

Root Cause Analysis (RCA) provides the food industry with a straightforward and systematic approach to define the problem encountered, identifying why it happened and what can be done to prevent recurrence.

RCA identifies a step or series of steps in a chain of events where an action can be taken which will change procedure or behaviour that would otherwise potentially lead to a food safety incident. In collaboration with industry representatives, best practice for conducting RCA has been identified as follows:

1. Define the incident

Firstly identify and agree with those involved in the investigation a full description of the incident.

2. Contain the incident

Immediate corrective action must be taken to contain the incident and to ensure that any associated food safety risk is minimised.

3. Categorise the immediate cause

Identify the basic systems which may have broken down resulting in the incident.

4. Determine the root cause(s)

Identify the direct causes and actions leading up to the incident – keep asking 'Why?'.

5. Define preventative action

Identify measures and corrective actions to rectify the failure, so minimising the risk of occurrence.

6. Review the process

- What lessons have been learnt?
- How will the knowledge be embedded?
- How can knowledge be shared?

Used correctly, RCA will minimise the likelihood of incident recurrence, develop and embed incident prevention knowledge across industry and deliver financial savings, by focusing resources and avoiding costs associated with recalls and withdrawals.

If a number of root causes or similar issues are aggregated and considered together, emerging themes relating to underlying issues can be uncovered. Further details regarding RCA and the application of this are contained in Case study 2 and the 'Looking ahead' section

Food fraud work programme

Food fraud is the deliberate placing on the market, for financial gain, of foods that are falsely described or otherwise intended to deceive the consumer. It includes the substitution and adulteration of foods with cheaper, often inferior ingredients and the sale of foods that may have public health implications, such as foods that are unfit for human consumption or are knowingly contaminated.

Our food fraud programme seeks to improve the assistance we are able to give to local authorities, through raising awareness and take up of the existing resources (both advisory and financial) that are available to assist local authorities in their investigations into food fraud activity. As part of this work, in 2011, fighting fund[4] money totalling £172,034 was allocated to 13 local authorities involved in food fraud investigation.

Another key aspect of our work in this area is our Food Fraud Database. This system relies on local authorities, industry and consumers mailing information on known or suspected food fraud, which could include any illegal activity relating to food, to our dedicated mailbox foodfraud@foodstandards.gsi.gov.uk or calling our answer phone 020 7276 8527.

In 2011, our Food Fraud Team entered approximately 1,400 records on the Food Fraud Database, which is the highest number of reports for a single year. This figure is up approximately 55% on the number of reports (899) received during 2010. This substantial increase demonstrates the success of the continued awareness raising work undertaken by our staff and the success of joint collaborative enforcement action and publicity from acting on shared intelligence.

Exercise programme

We continued to regularly take part in emergency exercises during 2011, to test our incident response capability, update our procedures and protocols and strengthen resilience.

In the early part of the year, Exercise Nightshade was successfully held to rehearse the Agency's response to a high level microbiological incident.

[4] The 'fighting fund' refers to financial support that the FSA offers to local authorities to assist them with their enforcement work. Applications from local authorities are assessed on a case-by-case basis.

Exercise Larkspur, a three-staged exercise programme, was also undertaken to rehearse response procedures and communications using a major feed/food scenario. The programme was developed to address the findings and recommendations in the Mackenzie Report, following the 2008 dioxin incident, and included a three-day event to rehearse response procedures and communications including out-of-hours working arrangements.

International work

We have been actively supporting the European Commission in a range of international initiatives to promote and enhance the use and understanding of the Rapid Alert System for Food and Feed (RASFF) and the application of Regulation (EC) No 178/2002 laying down the general principles and requirements of food law and procedures in matters of food safety. These activities have included UK representation at the following workshops:

- **Croatia** – Traceability and the RASFF system and Risk Management in the Food Chain.

  These workshops were to assist Croatia in making appropriate preparations for becoming a member state in 2013.

- **Kenya** – Regional Workshop for all African Nations on RASFF System.

  The workshop was to introduce the RASFF system, in order to assist Africa in developing a similar multi-national system.

- **Serbia** – Traceability of Food and Feed.

  This workshop was to assist Serbia in aligning their current systems regarding traceability to reflect that which is laid down in Regulation (EC) No 178/2002.

In addition, we represent the UK at the Working Group meetings for RASFF System, which are held twice a year. All member states meet in Brussels to discuss the working and continued improvement of the system.

iRASFF

In 2011, an enhanced RASFF system went online, providing rapid access to information exchange between member states. The UK helped refine and test iRASFF and was one of the first member states to fully adopt the new system.

Local authority workshops

During 2011, two incident handling workshops were held in Wales bringing together local authority enforcement officers and our staff working in approved meat establishments. Using a variety of case studies, attendees were able to collaborate on the investigative process to further improve communication and responses to future incidents. A separate incident handling workshop was held in Northern Ireland in January 2011 and this was attended by both local authority enforcement staff and food business operators.

The Food Fraud Branch also ran eight Evidence Gathering and Interview Skills courses across the UK, attended by 109 delegates representing 76 local authorities. The courses held during 2011 were well received and attendees have already contributed intelligence and used training to improve the success of enforcement action.

London Olympics and Paralympics 2012

The Olympic and Paralympic Games in London 2012 is the largest peacetime catering operation in the world, serving some 14 million meals across the Games period. Food safety enforcement during the Games will be delivered by local authorities, with support from us. As part of this supporting role, we have provided host local authorities with specific funding, targeted to enhance food business compliance, in the run up to, and throughout the period of, the Olympic and Paralympic Games.

Specific Olympic-related activities we have undertaken with key stakeholders in the run up to the Games, are summarised as follows:

- We have worked alongside delivery partners, including the London Organising Committee for the Olympic and Paralympic Games (LOCOG) to strengthen existing incident notification protocols.
- Work has been developed to ensure the contract caterers operating within all Olympic venues are linked into our Food Alert system and are fully aware of their statutory responsibilities to notify us, should any food safety incident occur.
- Test exercises have been conducted throughout the UK with input from ourselves, Health Protection Agency, LOCOG, devolved administrations and local authorities to ensure that roles and responsibilities and lines of communications are clearly defined and rehearsed in the run up to and throughout the period of the Games.
- We have also run a specific project designed to support host local authorities for the Games. The work incorporates funding for food business operator compliance, food sampling and surveillance, training of non-compliant food business operators and provision of storage areas in case of seizure of food and illegal mobile vehicles.

This work will continue and will be accelerated in the run up to the Games in 2012.

Whistleblowing

As the lead competent authority in the UK for food safety, we do on occasion receive information on issues relating to standards in the food industry. Where this information originates from someone working within industry it is considered to be 'whistleblowing'.

Whistleblowing procedures, which are managed by our Food Fraud team, allow those who work in the food industry to report concerns about malpractice in a safe and confidential environment. Specific information provided by stakeholders, including 'whistleblowers', continues to be a valuable and growing source of intelligence, enabling us to potentially detect new food safety risks. Our whistleblowing policy is available at: food.gov.uk/whistleblowing

The policy explains the procedures undertaken to protect the whistleblower from detrimental treatment or victimisation from their employer under the Public Interest Disclosures Act 1998. Whistleblowers can provide information to us in person, by telephone, in writing or by email.

Our Food Fraud Team will provide advice and guidance to whistleblowers, as necessary, for example to communicate our policy on handling any qualifying disclosure. In such a case, we would tell them that we are acting on the information provided, provide assurances that we will protect their identity and any potential links to the company in question, and to refer them to sources of further information and advice.

By operating these procedures, the Food Fraud team ensure appropriate investigations and enforcement actions are taken by local authority food law enforcement officers, whilst protecting the identity of the whistleblower.

In 2011, the Food Fraud team handled 54 cases originating from whistleblowers, a marked increase from the 18 cases in 2010 and 4 in 2009. Of the cases received in 2011; a total of 24 (45%) related to food safety/contamination, 12 (22%) to the mislabelling/misdescription of foods, 7 (13%) to the relabelling of foods or 'use by' dates, 5 (9%) each for both hygiene-related issues and illegal slaughter; and the remaining case (2%) referred to the illegal import of food.

There are a small number of ongoing investigations that may possibly lead to prosecutions. However, in the majority of cases, enforcement action focuses on establishing the existence of malpractice, appropriate intervention and the swift rectification of the issues discovered.

6 Looking ahead

Annual Report of Incidents 2012

We aim, as part of our policy of openness and transparency, to publish an Annual Report of Incidents in 2013 covering the calendar year 2012.

To feed into this process, we would be grateful for your views regarding what you thought about the 2011 report and what additional information, if any, you would like to see included in future. Our contact details can be found in Appendix 4.

Database integration project

In 2012, we will complete a project to link the Agency's incidents database with the emerging risks and food fraud databases, to create an 'intelligence network' to improve our capability to store, manage and search information and intelligence.

E-learning

In 2011, work commenced on an e-learning module for port health authorities to train them on the new iRASFF system. Under this system, which we have been trialling alongside other member states, PHAs will be able to notify the FSA and other member states (via the European Commission) rapidly regarding rejections of food consignments at point of entry following unsatisfactory sampling results. At the time of going to press, the new module was being finalised, prior to roll-out in 2012.

Emerging risks

Looking ahead, we plan to use the methods that have been developed to facilitate the detection of potential emerging issues, thereby increasing available knowledge of when, why and how food safety incidents develop.

As a main priority, we will continue to build partnerships with key stakeholders throughout the food chain to further develop mutual trust and confidence in sharing information relating to potential emerging issues. This will enable us to continue to develop effective working relationships for managing future risks in a timely and proportionate manner.

The increasingly global nature of the food supply chain and the ongoing effects of the current international climate may bring additional food safety risks to light. By using all the techniques and systems we now have at our disposal we shall be in a better position to identify and mitigate any such risks.

Root Cause Analysis

We will continue to promote and encourage the use of Root Cause Analysis across the industry and plan to complete the development of an e-learning module on the subject, which will be rolled out to local authority staff and food business operators during 2012.

Local authority workshops

During 2012, we are planning to roll out a series of tailored traceability exercises for local authorities in Wales designed to highlight the approach we follow during incidents, and to test the response of manufacturers in Wales. We have also secured funding to run another eight Evidence Gathering & Interview Skills training courses for local authority staff during the 2012 calendar year.

Online incident report form

As part of our policy of continuous improvement, we regularly review and refine our procedures, in the light of experience. Following a review of our online report form, which is used by food business operators and local authority officials to notify us of food incidents, we will be making a number of enhancements to our form. The revised form is scheduled to be launched in 2012.

7 Case studies

Case study 1:

Fukushima nuclear emergency

Background

On 11 March 2011, a devastating tsunami caused an emergency at the Fukushima-Daiichi Nuclear Power station in Japan. Large quantities of radioactive material were spread by the wind and sea and contaminated food over a wide area.

The UK was far enough away that the contamination would not affect its food chain but there were tens of thousands of UK citizens living and working in Japan who would need food safety advice.

Risk assessment

We regularly hold exercises on dealing with the unlikely event of a nuclear accident in the UK. The Fukushima event was very different, as the UK does not have the same risk of tsunamis or any sites with so many nuclear reactors in the same location. The normal way of responding would be to take a number of samples and have them tested for levels of radioactivity. These results would be used in special computer programmes that predict how wide the contamination has spread. With the Fukushima disaster, we were not able to get the testing results first-hand, so we used information supplied by the Japanese authorities and from other countries. By assessing the results it could be seen that the Japanese government was doing enough to ensure the safety of the food chain, so our citizens in Japan were sufficiently protected.

Action taken

UK citizens in Japan were advised which foods were safe to eat, and which foods from certain areas they should avoid. This advice was given via the Embassy and a number of websites, including the Foreign and Commonwealth Office's. The Agency has been monitoring the on-going food safety controls in Japan and has worked closely with the Japanese government, sharing experience of dealing with longer-term food safety matters gained from the aftermath of the Chernobyl accident.

The Agency's routine radiological food monitoring programme was used to show, as expected, that the UK food chain was not affected by the Fukushima accident. Soon after the accident, emergency legislation was put in place via Emergency Declarations – these impose special conditions on foods from the region and monitor Japanese food imports for radioactivity. All tests on these imports have shown radioactivity levels to be low, often so low as not to be detectable. Monitoring of imports continues for reassurance purposes and continues to show that imported Japanese food remains safe.

For further details of our response, please get in touch with our Radiation Team (see contact details at Appendix 4).

Case study 2:

Allergen incidents involving undeclared sulphites

Background

During 2011, more than 17% of food allergen incidents were linked with the undeclared presence of sulphites in pre-packed foods. The most common affected products were dried fruits, processed products and wines. Although sulphites can be found naturally in foods, they are frequently added as a preservative to avoid browning, prevent spoilage and stop the fermentation process of alcoholic drinks. The addition of sulphites must be declared on labelling if they are present in the final product at levels equal to or above 10mg/kg.

More than 73% of allergen incidents involving undeclared sulphites reported in 2011 related to foods that had been imported into the UK. The largest proportion of undeclared sulphites incidents related to dried fruit, which was either purchased in bulk and repackaged into smaller bags for retail sale or used as an ingredient in processed foods. In these cases, the presence of sulphites had not been accurately transposed onto the packaging of the final product.

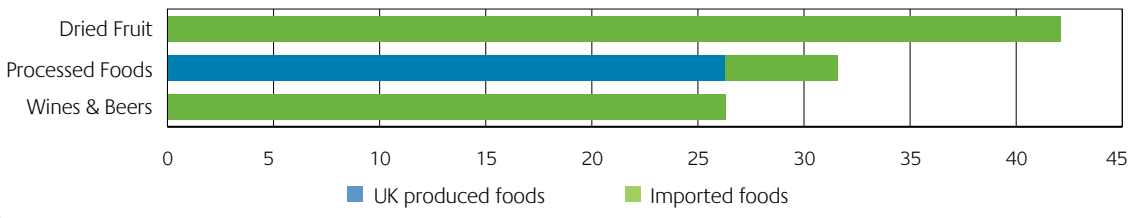
Risk assessment

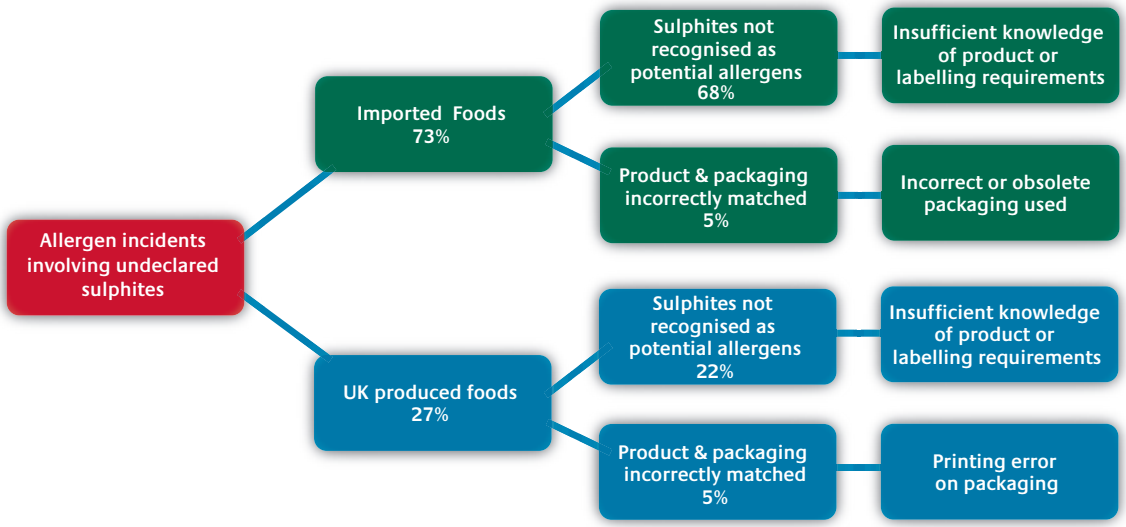
The undeclared presence of sulphites in foods can cause sulphite sensitive individuals to suffer adverse reactions. This can frequently cause the rapid onset of bronchospasm (wheezing) with this type of reaction being more common in individuals who already have asthma. Other symptoms observed include flushing, hives, low blood pressure and gastrointestinal symptoms.

Root Cause Analysis

Root Cause Analysis of incidents involving undeclared sulphites has shown that 90% were caused by poor or insufficient training of food business operators and their staff, resulting in lack of knowledge of either the product or the appropriate labelling requirements.

Allergen incidents involving undeclared sulphites (2011)





Action taken

During 2011, the Agency received 19 allergen incident notifications relating to sulphites and in response to these issued eight allergy alerts, which led to the affected products being withdrawn or recalled. Five alerts were issued against foods imported into the UK. The Agency, in conjunction with the relevant allergy support organisations, continue to promote the importance of training those responsible for allergen labelling. As part of this work we are developing an e-learning module on Root Cause Analysis will be made available to local authority staff and food business operators in 2012.

Case study 3:

Outbreak of *E. coli* O104 in Germany and France linked to fenugreek seeds from Egypt

Background

In May 2011, Germany's major outbreak of *Escherichia coli (E. coli)* O104 involved over 3,000 cases and over 40 deaths. In the UK, the Health Protection Agency (HPA) identified 7 cases that were linked to the outbreak in Germany, although no deaths were reported and the cases were not thought to have acquired their illness from food consumed in the UK. A second, much smaller, outbreak caused by the same strain occurred in France in June 2011. Based on the cases' food histories and a trace-back exercise, fenugreek seeds from Egypt were identified as the likely source.

Risks to consumers

The outbreak strain was capable of producing shiga toxins (also known as verocytotoxins), which can cause severe illness in humans. Symptoms can include acute gastroenteritis, mild fever, vomiting and bloody diarrhoea. Serious complications, such as Haemolytic Uremic Syndrome (HUS) can also occur. Detailed analysis by organisations found that the strain has unique properties that may explain why it is so virulent.

The fenugreek seeds that were implicated in the French outbreak were supplied by a UK company who had obtained them via a German importer. Samples of seeds including fenugreek from the UK company were tested by the HPA and the outbreak strain was not detected.

The risk to UK consumers was low as there is no evidence that affected seeds were placed on the market for human consumption in the UK. However, it is important that an investigation was carried out thoroughly and quickly given the serious nature of the illness.

Investigations during the outbreak identified mishandling of bean sprouts at catering establishments as a potential cause. This may be because of confusion or misinterpretation of the information on the packs. For example, some of the 'non ready-to-eat' bean sprouts were labelled as 'washed and ready-to-use' which may have led users interpreting this as 'ready-to-eat' rather than 'ready-to-cook'.

Action taken

- The European Food Safety Authority (EFSA) coordinated a trace-back exercise involving us and other relevant organisations. Certain batches of fenugreek seeds from Egypt were identified as the most likely source of the outbreaks and were withdrawn from sale across Europe to protect consumers. There is no evidence that the implicated seeds had been on sale in the UK.
- A temporary EU-wide ban on the import of certain seeds and beans from Egypt was implemented to protect consumers.
- The FSA issued temporary precautionary advice for consumers that while the outbreak was being investigated, sprouted seeds should be thoroughly cooked. Current Agency advice is that sprouted seeds can be eaten raw if they are labelled 'ready-to-eat'. All other sprouted seeds should be cooked thoroughly until steaming hot throughout. Caterers were also advised that they should source their supplies of sprouted seeds from producers that have recognised food safety and quality control systems in place.
- The FSA issued advice for seed and sprouted seed producers, food business operators and enforcement officials and is continuing to take work forward in this area.
- The Fresh Produce Consortium has led the development of UK industry guidelines in consultation with the Food Standards Agency promoting best practice for ready-to-eat sprout production[5].

[5] Fresh Produce Consortium; Guidance for food business operators on the hygienic sourcing, production and safe handling of ready to eat sprouts, First Edition, 2012.

Case study 4:

Salmonella contamination of paan leaves

Background

During 2011, *Salmonella* was detected in a significant number of consignments of paan leaves from Bangladesh and India following testing by UK Port Health Authorities.

Risks to consumers

Paan leaves (also known as betel leaves) from the plant *Piper betle* are often chewed raw by those from Asian communities as a palate cleanser or to aid digestion.

Since 11 August 2011, a high proportion of consignments of paan leaves imported into the UK from Bangladesh and India have tested positive for *Salmonella*. Further analysis by the Health Protection Agency found that at least 37 different strains of *Salmonella* were present in the samples.

Such contamination presents a potential public health risk given that paan leaves are handled and consumed in a raw state. *Salmonella* causes diarrhoea and vomiting, and can lead to serious illness in vulnerable people, although currently no cases of illness associated with this product have been reported in the UK.

Action taken

- We asked local authorities at UK ports and airports to sample and test all consignments of paan leaves and action was taken to prevent contaminated leaves from entering the market.
- We have liaised with the Bangladesh and Indian Authorities and the European Commission asking them to investigate the cause and source of the contamination and to ensure that effective remedial action is taken.
- We issued a web story to inform consumers about the potential risk of *Salmonella* food poisoning from paan leaves and put out targeted advice to Asian communities, via magazines and publications.

8 Appendices

Appendix 1

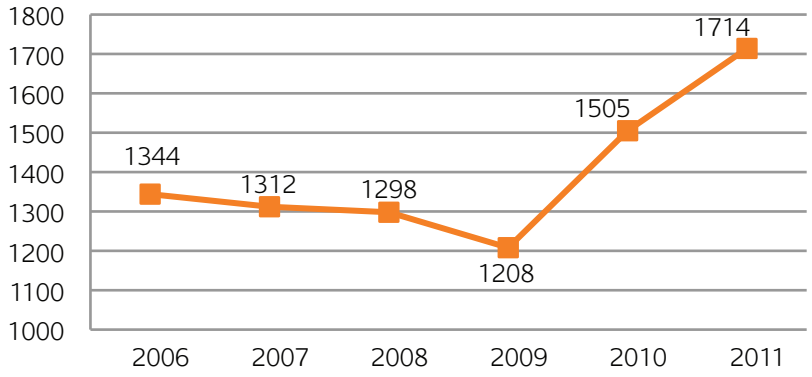
Statistics

Total number of incidents

In 2011, 1,714 incidents were investigated by the Agency. This represents an increase of 209 from the 2010 figure of 1,505.

Figure 1 shows the number of incidents which have been recorded each year since Jan 2006.

Figure 1: Recorded incidents January 2006 December 2011



The classification of incidents handled during 2011 is fairly similar to the preceding year with 7 high and 63 medium level issues being documented.

Table 1 details the classification composition of incidents recorded since 2006.

Table 1: Low, medium and high level incidents, 2006 2011

Year	Low	Medium	High	Total Incidents
2006	1166 (86.8%)	167 (12.4%)	11 (0.8%)	1,344
2007	1185 (90.3%)	111 (8.5%)	16 (1.2%)	1,312
2008	1176 (90.6%)	108 (8.3%)	14 (1.1%)	1,298
2009	1135 (94.0%)	72 (6.0%)	1 (0.1%)	1,208
2010	1437 (95.5%)	65 (4.3%)	3 (0.2%)	1,505
2011	1644 (95.9%)	63 (3.7%)	7 (0.4%)	1,714

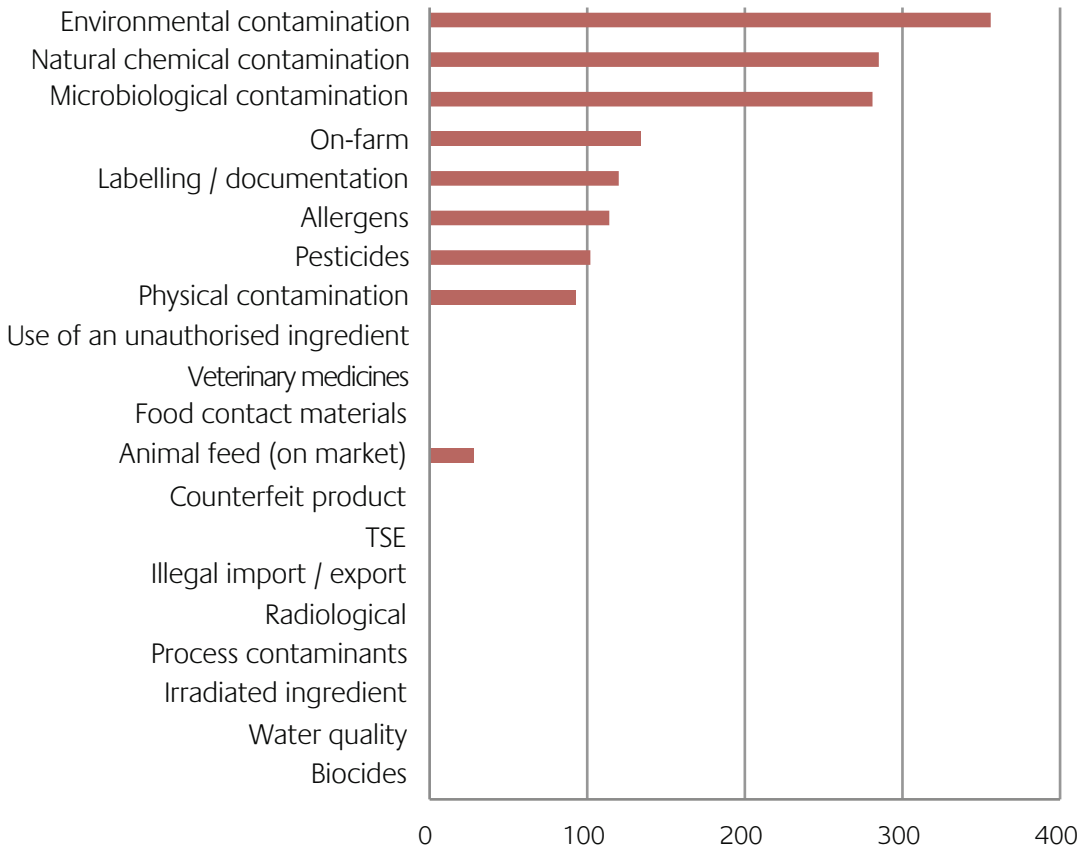
The 7 high level incidents related to the following:

- the presence of dioxins in vegetable feed from Germany
- the implications of the Japanese Tsunami upon UK imports
- an outbreak of *Escherichia coli* O104 in Germany
- an outbreak of *Escherichia coli* O104 in France
- an outbreak of *Escherichia coli* O157 PT8
- an outbreak of Botulism in Scotland
- international outbreak of *Salmonella Newport* linked to watermelons

Table 2: Incidents by category, 2006 2011*						
Category	2006	2007	2008	2009	2010	2011*
Allergens	61	86	84	86	79	114
Animal feed (on market)	9	10	13	10	8	28
Biocides	2	0	1	2	2	0
Counterfeit product	6	3	6	7	11	11
Environmental contamination	376	226	186	211	342	356
Food contact materials	15	26	35	50	37	40
Illegal import /export	16	17	7	14	16	9
Irradiated ingredient	14	23	10	6	7	4
Labelling /documentation	93	82	126	77	95	120
Microbiological contamination	147	163	186	218	271	281
Natural chemical contamination	169	215	230	150	228	285
On-farm	99	160	139	144	122	134
Pesticides	20	35	16	28	55	102
Physical contamination	139	123	110	56	116	93
Process contaminants	15	21	14	19	9	4
Radiological	11	14	6	7	4	7
TSE	10	8	4	9	9	10
Use of an unauthorised ingredient	52	46	66	70	59	67
Veterinary medicines	78	45	47	36	31	47
Water quality	12	9	12	8	4	2
Total	**1,344**	**1,312**	**1,298**	**1,208**	**1,505**	**1,714**

* In total, 12,306 incidents have been notified to the Agency since April 2000. As observed in 2010, environmental contamination issues contributed the most to incidents recorded in 2011 (see figure 2).

Figure 2: Incidents by category, 2011



Food Alerts and Information Notices

If there is a problem with a food product that means it should not be sold, then it might be 'withdrawn' (taken off the shelves) or 'recalled' (when customers are asked to return the product). The FSA issues information about product withdrawals and recalls to let consumers and local authorities know about problems associated with food. In some cases, a 'Food Alert for Action' is issued. This alert provides local authorities with details of specific action to be taken on behalf of consumers.

In 2011, the Agency issued a total of 106 alerts and information notices of which one was an update. This compares to 77 alerts and information notices (including seven updates) recorded in 2010.

Table 3 shows the breakdown of the 105 original alerts and information notices issued in 2011.

Table 3: Categories of Food Alert and Information Notices, 2011

Category	Food Alert for Action (FAFA)	Allergy Alerts (AA)	Recall Information Notice (RIN)	Withdrawal Information Notice (WIN)	Total
Allergens	–	56	–	–	56
Counterfeit Product	1	–	–	–	1
Environmental contamination	–	–	1	–	1
Labelling / documentation	1	–	8	1	10
Microbiological contamination	–	–	15	1	16
Natural Chemical Contamination	1	–	1	2	4
Physical contamination	–	–	15	–	15
Use of an unauthorised ingredient	–	–	1	–	1
Veterinary medicines	–	–	1	–	1
* Excludes updates				**Total**	**105***

Detailed Analysis of Incident Categories

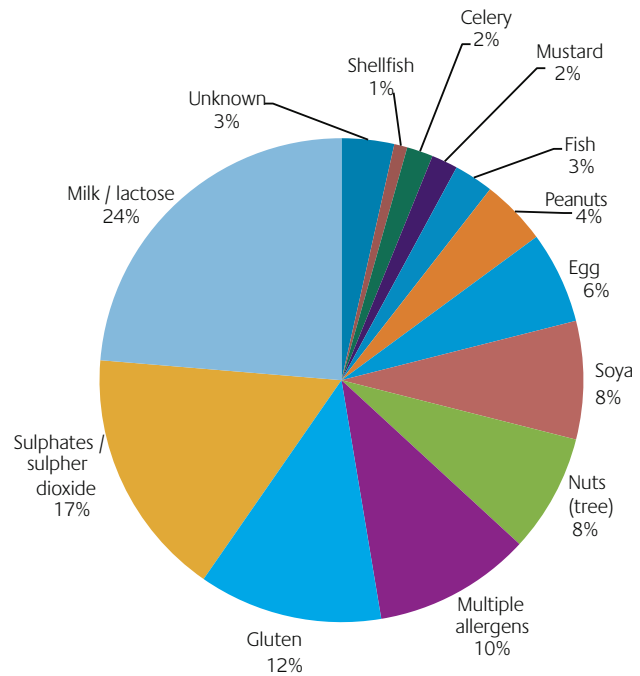
Allergens

The total number of allergen incidents in 2011 was 114 compared to 79 recorded in 2010. These are sub-categorised by allergen type in Table 4. The number of incidents in 2010 relating to milk increased from 9 to 27 in 2011 and was largely driven by issues relating to cross-contamination of plain chocolate with milk chocolate. However, the number of milk-related incidents in 2011 was similar to the annual numbers in 2006, 2007, 2008 and 2009.

Another increase was observed for incidents relating to gluten (7 reports in 2010 and 14 in 2011). This could be due to recent legislative changes, but the annual number of cereal-related incidents is not much greater than those in 2007 and 2008.

Table 4: Allergen incidents by sub category, 2011

Allergen sub category	Number of incidents
Milk / lactose	27
Sulphites / sulphur dioxide	19
Gluten	14
Multiple Allergens	12
Nuts	9
Soya	9
Egg	7
Peanuts	5
Fish	3
Mustard	2
Celery	2
Shellfish	1
Unknown	4
Total	**114**



Animal Feed

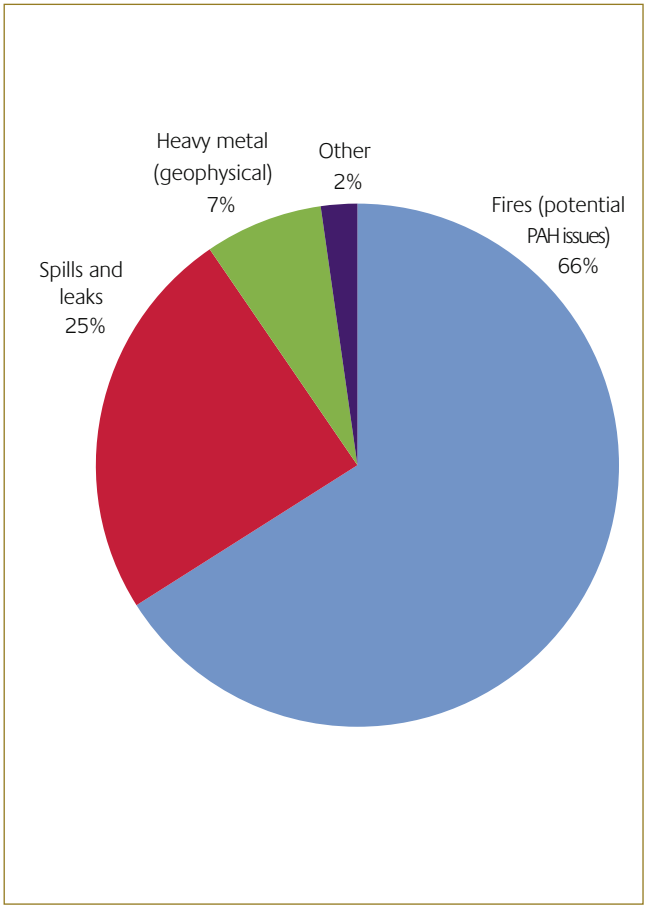
A total of 28 incidents involving animal feed were recorded during 2011 compared to 8 during 2010. Issues relating to dioxins and polychlorinated biphenyls (9 incidents) and heavy metals (9 incidents) were the largest contributors to this category.

Environmental contamination

A total of 356 environmental contamination incidents were recorded during 2011 compared to the 342 incidents documented in 2010. Table 5 shows the environmental contamination incidents recorded in 2011 by sub-category. The profile of these subcategories is very similar to that observed in 2010.

Table 5: Environmental contamination incidents by sub category, 2011

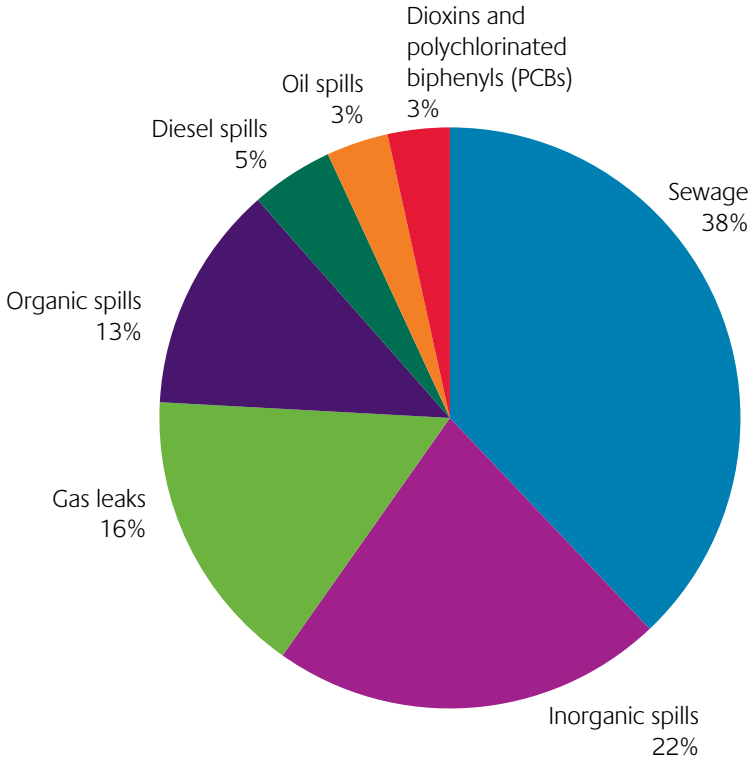
Environmental contamination	Number of incidents
Fires (potential PAH issues)	235
Sewage	33
Heavy metal (geophysical)	26
Inorganic spills	19
Gas leaks	14
Organic spills	11
Diesel spills	4
Oil spills	3
Dioxins and polychlorinated biphenyls (PCB's)	3
Other	8
Total	**356**



Incidents involving fires comprise 66% of this sub-category compared to 68% in 2010. Such incidents may represent potential risks to food safety through contamination to crops or food stores by exposure to polycyclic aromatic hydrocarbons (PAHs). PAHs are produced as by-products of the combustion of organic and fossil fuels and are potentially carcinogenic.

Figure 3 details the sub-categories relating to spillages and leaks. A total of 33 incidents relating to sewage spills were recorded in 2011 compared to 18 in 2010 and just 2 in 2009.

Figure 3: Incidents relating to environmental spills and leaks, 2011



Food contact materials

A total of 40 food contact material incidents were reported in 2011 compared to 37 in 2010. Incidents relating to formaldehyde and primary aromatic amines (PAA) (15 and 13 incidents respectively) were the largest contributors to this category.

Labelling and documentation

The number of reported incidents relating to labelling and documentation increased from 95 in 2010 to 120 in 2011. Table 6 shows the number of incidents documented in 2011 by sub-category.

Microbiological contamination

Figure 4 shows that the numbers of incidents relating to microbiological contamination have repeatedly increased since 2006.

Table 6: Labelling and documentation incidents by sub category, 2011

Labelling and documentation subcategory	No of incidents
General labelling violations	64
Documentation incorrect	21
Fraud	12
Unauthorised premises	12
Date code incorrect	9
Other	2
Total	**120**

Figure 4: Microbiological contamination incidents January 2006 to December 2011

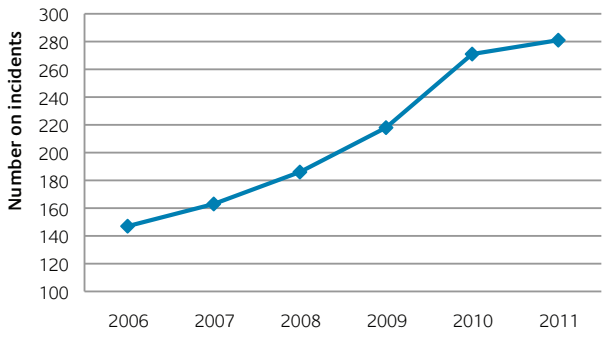


Table 7 details the microbiological contamination incidents reported to the Agency during 2011. The number of incidents relating to specified bacterial contamination increased from 128 in 2010 to 202 in 2011. This reflected the increase in *Salmonella spp*. incidents from 36 to 118 over the same period (see Table 8). This appears to be largely due to Border Inspection posts reporting 79 incidents of *Salmonella spp*. in Paan leaves between September and December.

The number of incidents relating to viruses was unusually high in 2010, due to increased reporting of norovirus at the beginning of that year. It fell from 62 incidents in 2010 to just 10 in 2011.

Table 7: Microbiological contamination incidents by sub category, 2011

Microbiological contamination subcategory	No of incidents
Specified bacterial contamination	202
Yeasts & moulds	14
Viruses	10
Parasites	3
Bad hygienic state including high colony counts	52
Total	**281**

Table 8: Specified bacterial contamination incidents, 2011

Bacterial contamination incidents	
Identified bacterial *Salmonella spp.*	118
Listeria monocytogenes	35
Escherichia coli O157 and other verocytotoxin-producing *E. coli* (VTEC)	17
Bacillus spp.	8
Clostridium botulinum	7
Campylobacter spp.	4
Enterobacter spp.	4
Listeria spp. (not monocytogenes)	3
Clostridium perfringens	2
Staphylococcus aureus	2
Pseudomonas aeruginosa	1
Yersinia enterocolitica	1
Total	**202**

Natural chemical contamination

The number of incidents relating to natural chemical contamination in 2011 was 285 compared to 228 in 2010. In particular, numbers of incidents relating to aflatoxins rose from 137 in 2010 to 182 in 2011 (see Table 9). It may be largely the result of increased testing of peanuts at border inspection points.

Numbers of algal toxin incidents also showed an increase, rising from 59 in 2010 to 76 in 2011. Diarrhetic shellfish poisoning (DSP) was the principal contributor to the algal toxin sub-category accounting for 47 of the 76 incidents reported. Ten incidents relating to azaspiracid toxin (AZA) were also recorded in 2011.

Table 9: Natural chemical contamination incidents by sub category, 2011

Natural chemical contamination sub category	Number of incidents
Aflatoxins	182
Ochratoxins	10
Other Mycotoxins	3
Algal toxins	76
Histamine	5
Scrombrotoxin	2
Other	7
Total	**285**

On-farm

The number of 'on farm' incidents recorded in 2011 slightly increased when compared to 2010 (134 and 122 incidents respectively). The profile of the sub-categories (Table 10) is very similar to that observed in 2010. Animal poisoning from heavy metals remains the main contributor with issues relating to lead and copper responsible for the majority (64 and 16 incidents respectively). Lead poisoning appears to mainly be associated with the ingestion of paint and the consumption of pieces of old car batteries resulting from fly tipping. Copper poisoning incidents seem to be largely caused by mistakes in the preparation of feed mixtures produced 'on farm'.

Table 10: On farm contamination incidents by sub category, 2011

On farm sub category	Number of incidents
Heavy metal poisoning	81
Botulism	37
Other	16
Total	**134**

Pesticide residues

Numbers of incidents falling into this category increased from 55 in 2010 to 102 in 2011. Incidents relating to the insecticide acephate were the most prevalent (15 incidents). The range of pesticides responsible for the remaining incidents was very diverse with 36 differing agents being involved. The observed increase in frequency of incidents in 2011 may be largely the result of targeted surveillance of Okra for pesticides at our border inspection points (31 incidents).

Physical contamination

The number of incidents falling into this category during 2011 was 93, representing a decrease when compared to 2010 (116 incidents). The profile of incident numbers in the subcategories is similar to that of 2010. Table 11 shows that metal, pests and glass issues continue to be the three largest categories.

Use of unauthorised ingredients

The numbers and types of incidents reported in 2011 were similar to that observed in 2010. Issues relating to genetic modification and colours were the main contributors to this category (see Table 12).

Table 11: Physical contamination incidents by sub category, 2011

Physical contamination sub category	Number of incidents
Metal	19
Pests	18
Glass	17
Plastic	10
Animal origin	6
Rubber	4
Stones	2
Hair	1
Wood	1
Other	15
Total	**93**

Table 12: Use of unauthorised ingredients by sub category, 2011

Use of unauthorised ingredients sub category	Number of incidents
Genetic Modification	14
Colours	12
Carbon monoxide	7
Novel foods	7
Dietetic food supplements	6
Other	21
Total	**67**

Veterinary Medicines

A total of 47 incidents relating to residues of veterinary medicines were recorded during 2011 compared to 31 in 2010. Issues involving ivermectin (18 incidents recorded) were the largest contributor to this category. Residues involved with the remaining incidents were very diverse in type with a total of 19 different types of veterinary medicines being recorded.

Incidents by notifier

Table 13 lists the notifiers of the incidents recorded by the Agency since 2006.

Table 13: Incidents by notifier 2006 – 2011

Notifier	2006	2007	2008	2009	2010	2011
Agency Survey	5	4	7	16	14	7
Ambulance Service	0	0	0	0	0	2
Border Inspection Points	203	254	232	201	233	426
Customs & Excise	1	1	1	2	0	0
DARD	6	39	33	34	6	7
DEFRA	26	19	22	27	35	28
Environment Agency	26	23	20	20	20	15
EU Member States	94	93	87	82	120	121
European Commission	4	5	40	44	46	34
Fire Services	263	158	129	136	223	246
FSA operations group	3	5	3	7	5	12
General Public	14	12	9	5	13	14
Government Offices of the Regions	3	0	0	0	0	7
Health Protection Agency	18	20	0	15	26	21
Health & Safety Executive	0	0	0	0	0	8
Industry	104	132	163	109	95	113
Laboratories	7	8	19	42	97	91
Local Authority	267	259	347	246	376	297
Maritime and Coastguard Agency	5	4	4	0	4	3
NHS	5	1	2	2	5	1
Nuclear Power Stations	5	6	4	1	3	1
Police	12	10	8	7	7	7
Scottish Agricultural College	21	15	13	8	12	5
Single Liaison Body	121	103	28	69	83	85
Third Country	0	0	0	0	3	1
Animal Health / Veterinary Laboratories Agency	79	110	93	82	68	115
Veterinary Medicines Directorate	46	26	12	7	9	5
Water Authorities	0	0	0	0	0	28
Other	6	5	22	46	2	14
Total	**1,344**	**1,312**	**1,298**	**1,208**	**1,505**	**1,714**

Incidents by country of origin

Incidents recorded by category and origin are presented in Table 14. Imported foods account for 36% of the incidents reported in 2011 whilst foods from EU Member States represent 10% of the total. However, some categories such as On-farm and Environmental contamination incidents are predominantly of UK origin, while others, such as pesticide incidents are mainly due to imported foods.

Table 14: Incidents by Origin, 2011

Category	UK Origin	EU Origin	Imported Origin	Unknown Origin	Total 2011
Allergens	73	25	11	5	114
Animal Feed	8	8	9	3	28
Biocides	0	0	0	0	0
Counterfeit Product	2	3	3	3	11
Environmental Contamination	328	8	16	4	356
Food Contact Materials	4	4	30	2	40
Illegal Import / Export	0	0	9	0	9
Irradiated Ingredient	0	0	4	0	4
Labelling / documentation	51	33	32	4	120
Microbiological contamination	113	46	117	5	281
Natural chemical contamination	80	4	194	7	285
On-farm	134	0	0	0	134
Pesticides	3	2	93	4	102
Physical contaminants	52	32	6	3	93
Process contamination	1	0	3	0	4
Radiological	6	0	1	0	7
TSE	10	0	0	0	10
Use of an unauthorised ingredient	10	2	51	4	67
Veterinary medicines	11	2	32	2	47
Water quality	1	0	0	1	2
Total	**887**	**169**	**611**	**47**	**1,714**

Table 15 shows the number of incidents by country of origin. India was the largest contributor (196 incidents) followed by China (91 incidents) and Bangladesh (78 incidents).

Table 15: Incidents by country of origin

Non EU Origin				EU origin	
India	196	South Africa	4	Rep of Ireland	25
China	91	Sri Lanka	4	Italy	25
Bangladesh	78	Indonesia	3	Netherlands	22
Brazil	31	Maldives	3	France	21
Japan	27	Vietnam	3	Germany	18
Egypt	22	Iceland	2	Poland	16
Turkey	20	Kenya	2	Belgium	13
United States	18	Serbia	2	Spain	11
Pakistan	15	Taiwan	2	Denmark	3
Thailand	13	Bolivia	1	Romania	3
Ghana	12	Gambia	1	Austria	2
Nigeria	8	Iran	1	Greece	2
Philippines	7	Israel	1	Portugal	2
Dominican Republic	6	Madagascar	1	Sweden	2
Malaysia	6	Morocco	1	Czech Republic	1
Argentina	5	Nepal	1	Estonia	1
Australia	4	Nicaragua	1	Latvia	1
Canada	4	Hong Kong	1	Lithuania	1
Chile	4	Tunisia	1		
Jordan	4	Ukraine	1		
New Zealand	4				

Key movements in 2011 compared to recent years

The numbers of incidents in most categories vary considerably from year to year. There are a number of factors responsible for this. For instance, many types of incidents occur sporadically and so tend not to spread evenly across time. In addition, the frequency of some of the underlying problems that cause incidents may have changed. Moreover, as many possible incidents go unreported, the numbers will reflect differences in reporting and investigation. Therefore, the incidents rates can reflect much more than just the level of risk.

Table 16: Key movements in incidents in 2011 compared to recent years	
Category	Key movement
Natural chemical contamination	The numbers of incidents relating to aflatoxins rose from 137 in 2010 to 182 in 2011. This seems to be largely the result of increased testing of peanuts at our border inspection points. Although comparatively small in terms of the total number of incidents reported, issues relating to algal toxins appear to be generally increasing over the past few years with 14 incidents occuring in 2009 and 59 and 76 in 2010 and 2011 respectively.
Microbiological contamination	The numbers of microbiological incidents have been steadily increasing since 2006. Incidents relating to the detection of *Salmonella spps* in imported Paan leaves (79 incidents) resulted in this trend being maintained in 2011.
Pesticides	The numbers of incidents relating to pesticides have remained relatively similar from 2006 to 2009 with a slight increase in 2010 (55 incidents). Driven largely by increased testing of Okra at border inspection points, the numbers of incidents further increased in 2011 to 102.
Allergens	The total number of allergen incidents in 2011 was 114, considerably higher than the yearly average of 79 between 2006 and 2010. However, the profile of the sub-categories was similar to that earlier period.
Animal feed	The total number of animal feed incidents in 2011 was 28, considerably higher than the yearly average of 10 between 2006 and 2010. The reason for the increase is not known.
Incidents by Notifier	The number of incidents reported by our border inspection points (BIPs) has remained relatively similar each year from 2006 to 2010 ranging between 201 and 254 incidents. However, a total of 426 were recorded during 2011, which is nearly double the yearly average of the previous five years. This increase may be in part driven by the issues of *Salmonella spps* in Paan leaves, pesticide residues in okra and aflatoxins in peanuts, which are all usually reported by BIP. Conversely, recent changes to the RASFF reporting system may have led to more incidents being reported by BIPs, which could explain some of the key movements above.

NB: While every attempt has been made to try to ensure that the data in this appendix is correct, minor errors in categorisation may be present.

Appendix 2

Who tells us about Incidents?

The list below shows the wide range of organisations that notify us of incidents:

Food business operators	Local authorities	Fire service
European Commission	Environment Agency	Other member states
Members of the public	British Nuclear Group	Police
Maritime and Coastguard Agency	Department of Health	Laboratories
Scottish Agricultural College	National Health Service	Health Protection Agency
AHVLA	Border Inspection Posts	Defra
DARD		

Notifying organisations

Local authorities

Local authorities regularly undertake inspections of premises and sample products from wholesale or retail outlets. Where breaches of food safety requirements are identified, the authority will contact the Incidents Branch using our incident report form.

Local authorities provide information to us under the Single Liaison Body (SLB) system. We are the SLB for the UK as designated under Article 35 of Regulation (EC) No. 882/2004.

The Single Liaison Body

- assists and coordinates communication between EU member states on food issues
- forwards complaints and requests for information to member states
- receives incoming requests for assistance and directs these to the appropriate originating local authority
- resolves difficulties in communication and liaison

Food business operators

Food business operators are required by law (Article 19 of Regulation (EC) No. 178/2002) to inform the competent authorities where they consider or have reason to believe that a foodstuff is not in compliance with food safety requirements. In the case of the UK, enforcement authorities (local and port health authorities) and us are the competent authorities.

The European Commission

The European Commission operates the Rapid Alert System for Food and Feed (RASFF). The RASFF is a network of member states, the European Commission and the European Food Safety Authority. Whenever a member of the network has any information relating to the existence of a serious direct or indirect risk to human health, this information is immediately forwarded to the Commission using a rapid alert form. The Commission then immediately transmits this information to the members of the network.

Members of the public

Occasionally, we will receive notification of food incidents and quality issues from members of the general public, although we stress that the public should always contact their local authority first. To find your nearest food enforcer, use the search facility on our website:

food.gov.uk/yourarea

Emergency services

Notifications are regularly received from the police, fire service and the Maritime and Coastguard Agency. These notifications usually relate to fires, oil or sewage spills or chemical leaks where there is the potential for contamination in the food chain.

Other government departments/agencies

Notifications may be received from many government departments or agencies; for example, the Department for the Environment, Food and Rural Affairs, the Environment Agency, the Health Protection Agency and the Animal Health and Veterinary Laboratories Agency.

Organisations in devolved countries

We receive notifications from Public Health Wales, the Scottish Agricultural College and the Department of Agriculture and Rural Development for Northern Ireland.

Border inspection posts (BIPs)

BIPs are EU-approved entry points for products of animal origin, originating in countries outside the EU. UK BIPs routinely sample incoming consignments of foodstuffs to ensure compliance with legislation. Adverse results are notified to us and action is taken to ensure that the incoming consignment is destroyed or re-exported where permissible.

Border Rejection Notifications are sent by us to the European Commission via RASFF for circulation to all member states. Information circulated in this manner is used by BIPs to determine which incoming consignments to sample. Following the rejection of a consignment at a BIP, the responsible manufacturer or exporter can expect to have further consignments sampled to ensure compliance with legislation.

Miscellaneous organisations and facilities

Groups such as the Anaphylaxis Campaign, Coeliac UK and Allergy UK will notify us if they become aware of any issues relating to food allergies. Nuclear Power stations and independent laboratories will also notify the Agency of incidents.

Appendix 3

How do we manage an incident and what action do we take to protect consumers?

How do we classify an incident?

We classify all incidents using a combination of the severity of the incident and the complexity of the investigation. A number of parameters contribute to these high-level criteria. But the overall assessment or output is simply high, medium or low.

Severity	Complexity
Extent of health effects	Numbers of reports received
Numbers and/or groups of consumers affected	Numbers of products/locations Number of agencies involved
Public health risk assessment	Traceability
Perceived risk by consumers	
Perceived risk by the media	

Each heading contains a range of scores and is weighted to produce a final score that equates to high, medium or low. The system enables rapid and consistent categorisation of incidents, once notified, and as they develop. This allows incidents to be effectively scoped, resourced and managed. The system is not designed as a risk assessment tool, but a means to aid us in planning and management decisions.

Low

These are minor incidents, with localised effects and few, if any, food safety implications. Examples of such incidents include barn fires, vehicles in rivers, or minor oil spills.

Medium

These include incidents involving evidence of illness, impact on vulnerable groups (babies, pregnant women or the elderly) and breaches of statutory limits (for example, for mycotoxins). In some cases the public or the media are likely to express some concerns.

High

These are severe incidents with the potential to cause serious illness or deaths. They are complex, with a large number of products affected and a high level of resources required to manage. They are widespread and likely to generate a high level of concern among the public and the media.

How do we manage incidents?

We have set procedures contained in our Incident Response Protocol (IRP) that we follow for all incidents. The protocol covers, among other things, incident notification, the roles and responsibilities of our staff during an incident, incident classification, record-keeping procedures, incident closure and review procedures. The protocol is reviewed on a regular basis and, where appropriate, updated in the light of review findings.

All incidents are recorded on our incidents database. The incidents statistics included within the annual report come from this database. Once an incidents notification is received by us, it is immediately circulated to the relevant internal policy division for a risk assessment.

Risk assessment

We have a wide range of scientific and policy experts at our disposal during incidents. These experts provide advice on risks to human health, risk to the food chain and applicable legislation during incidents. This advice is used to formulate risk management options and determine a risk management strategy during each incident.

We also have access to various independent scientific committees that comprise individuals with recognised expertise within their field. These committees provide independent, expert advice to the Agency on research and policy when requested. Further details regarding the work of the committees are available via our website:

food.gov.uk/science/ouradvisors/

Risk management

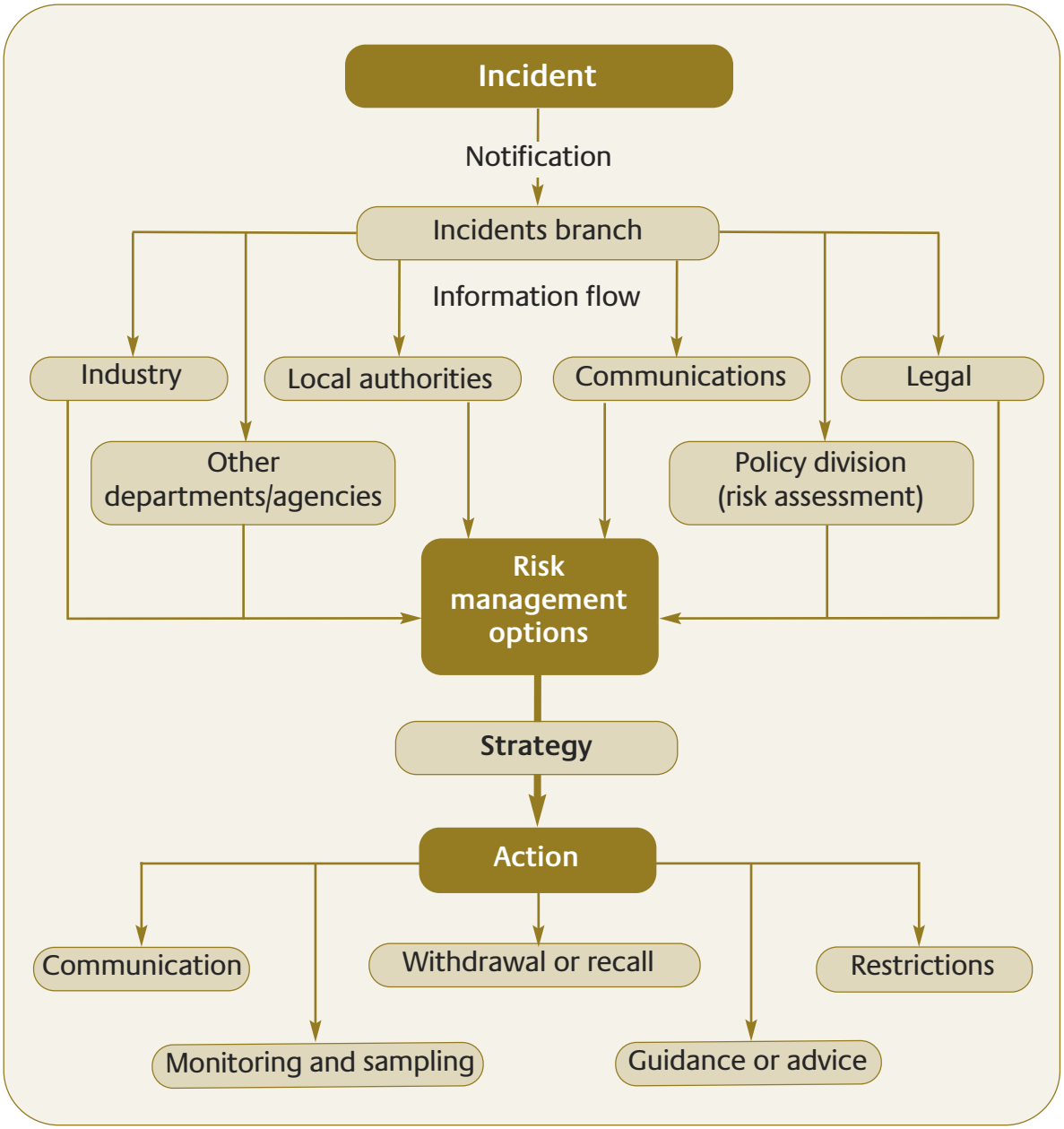
Risk assessment is used to inform the risk management options during each incident. The Agency will liaise with the relevant local authorities, industry, other government departments and agencies in order to arrive at an appropriate risk management strategy.

The strategy will take into account

- risk assessment
- risk communication
- proportionality
- legislation
- the precautionary approach

Once a strategy is decided upon by ourselves in consultation with key external stakeholders, it will be disseminated to teams within the Agency, local authorities, industry and others as appropriate. Above all, during incidents ensuring that food safety is protected and food standards are maintained is paramount.

Our incident handling strategy is illustrated in the following process diagram.



What will we do with the information once received?

We will use the information received to inform our risk assessment, which, in turn will be taken into account when considering our risk management and risk communication options. Dialogue with industry and local authorities is encouraged at all stages to ensure our risk management advice is proportionate and practical.

We may, in the light of the information received, issue a food alert to local authorities, who enforce food law. These alerts are used during incidents where, for example, the distribution of a product is wide and will potentially involve many local authorities.

These alerts are also simultaneously published on our website to alert consumers and may be picked up by the national media. However, we only issue food alerts for a fraction of the incidents we deal with – in 2011, there were 59 alerts and 47 information notices out of a total of 1,714 incidents. The following section provides further information regarding food alerts.

What actions can we take to protect consumers' interests?

There are a number of different actions that we can take to protect food safety and consumers.

Food Alerts, Allergy Alerts and Information Notices

Alerts are our method of informing local authorities about problems associated with food and, in some cases, they provide details of specific action to be taken.

The different categories of food alert and information notices we issue are detailed below:

- Food Alerts for Action (FAFA) are issued when an incident requires enforcement action from them.
- Product Withdrawal Information Notices (WINs) and Product Recall Information Notices (RINs) are issued to bring an incident to the attention of local authorities
- Allergy Alerts are issued in cases where foods have to be withdrawn or recalled, if there is a risk to consumers, because the allergy labelling is missing or incorrect or if there is any other food allergy risk.

Food Alerts, RINs, WINs and Allergy Alerts are often issued in conjunction with a product withdrawal or recall by a manufacturer, retailer or distributor. Alerts are also copied to Consultants in Communicable Disease Control other government departments and food trade organisations, to alert them to current food issues. During 2011 we issued 3 Food Alerts, in addition to the 42 RINs, 4 WINs, and 56 Allergy Alerts.

Rapid Alert System for Food and Feed

The purpose of the Rapid Alert System for Food and Feed (RASFF), established in 1979, is to provide EU member states with an effective tool for the exchange of information on measures taken to ensure food safety.

We use the European Commission's RASFF system to:

- obtain information about matters that we need to act on; and
- inform the Commission and other member states of matters that they need to act on

RASFFs are divided into 'border rejections' 'market notifications' and 'news' notifications. This system automatically alerts border inspection posts (sea ports and airports) enabling them to target their checks on imported food. The Commission also has a procedure in place to alert third countries (outside the EU) about problems affecting food and will, where appropriate, contact third countries via their embassies. In 2009 the Commission introduced the RASFF portal, which is a publicly available online searchable database of RASFF notifications.

Publish advice and guidance

We issue statements and precautionary advice, where necessary, to consumers and industry, informing them about issues affecting the human food chain and advising of action they should take. We aim to issue advice, where necessary, within hours of being notified of an incident. However, in some cases we may need to seek further advice, for example, from our scientific advisory committees, which may add some extra time to the process. The precautionary advice is published on food.gov.uk and is reviewed as new information comes to light. During a high-level incident, we may also decide to open a hotline to deal with calls from the general public about the emergency.

Where food is imported, the Agency will issue advice and instructions to local authorities and port health authorities at sea ports, airports and border inspection posts, and will work with Customs to identify consignments. The Agency's web-based GRAIL (Guidance and Regulatory Advice on Import Legislation) database also provides enforcement officers with a searchable up-to-date database of:

- all imported food guidance and legislation relating to products not of animal origin and fish and fishery products

- a summary of import controls on specific products/countries
- an A-Z of relevant contacts
- useful web-links on imported food

GRAIL is available to all free-of-charge at https://grail.foodapps.co.uk/grail/general/home.aspx

A temporary closure notice to close shellfish harvesting areas may be issued by local authorities, on our recommendation. This measure is applicable where an incident is localised.

We also issue guidance. For example we issue guidance to farmers outlining the risks and how to avoid lead poisoning cases in their livestock.

In relation to remedial issues (for example the clear-up operation following environmental contamination incidents), where lead responsibility jointly rests with Defra and the Environment Agency, we will participate in the process and provide advice. This ensures that any remedial strategy takes full account of food safety issues.

Voluntary restrictions

These are measures agreed verbally and in writing with a producer or product purchaser. For example, movement restrictions may be placed on potentially affected livestock following an on-farm lead poisoning incident.

Statutory restrictions

Subject to Ministerial approval, we may implement an order under the Food and Environment Protection Act (FEPA) 2005 to 'ring-fence' an area. This restricts the sale or movement of food or agricultural produce. This order will be periodically reviewed as new details come to light. The FEPA order itself will contain prohibitions regarding the use of affected food throughout the UK. A FEPA could be activated, for example, following a large-scale oil spill. There were no FEPA orders issued by us in 2011.

In contrast to those powers under FEPA, provisions in the Food Safety Act 1990[6] will be used to deal with emergencies on a narrower scale in relation to a particular class of food.

The Food Safety Act 1990 empowers the designating authority to make emergency control orders in relation to commercial operations regarding food, food sources (including imported food) or contact materials of any class or description that involves or may involve imminent risk of injury to health. Powers under the Food Safety Act 1990 are different to the powers under the FEPA, in that it is not necessary under FEPA for there to be an imminent risk of injury to health before an order can be made.

By notifying us promptly of an incident, external stakeholders can ensure that, where necessary, action will be taken by us to protect food safety.

[6] Parallel legislation applies in Northern Ireland - The Food Safety (Northern Ireland) Order 1991.

Sampling and analysis

We may decide to initiate a sampling and analysis programme to complement any sampling and analysis being carried out by other departments/agencies. Analysis will be carried out by the most competent laboratory available. Our sampling programme will be reviewed as new information comes to light.

Following an incident, emergency safeguard measures may be issued at EU level where there is a potentially serious risk to health involving a food product from a non-EU country. These can impose stricter import conditions and require additional controls at EU borders, including additional sampling and analysis. A list of products subject to safeguard measures follows:

1. Melamine Contamination of Certain Products from China.
2. Guar gum from India due to contamination risks for PCP and dioxins.
3. Products covered by Commission Regulation (EC) No.1152/2009 which provides safeguard controls on certain food products due to aflatoxins.
4. Fishery products from Albania for histamines.
5. Farmed fishery products from Indonesia for pharmacologically active substances, in particular: chloramphenicol, metabolites of nitrofurans and tetracyclines (at least tetracycline, oxytetracycline and chlortetracycline).
6. Aquaculture fishery products from India for the presence of chloramphenicol, tetracycline, oxytetracycline, chlortetracycline and of metabolites of nitrofurans.
7. Crustaceans from Bangladesh for the presence of residues of pharmacologically active substances and in particular: chloramphenicol, tetracycline, oxytetracycline and chlortetracycline, metabolites of nitrofurans, as well as malachite green, crystal violet and their respective leuco-metabolites.
8. Sunflower oil from the Ukraine due to contaminated risks by mineral oil.
9. Certain products of animal origin from China for the presence of chloramphenicol and metabolites of nitrofurans, and in addition for aquaculture fishery products the presence of malachite green and crystal violet and their metabolites.
10. Prawns from Myanmar for the presence of chloramphenicol.

11. Certain bivalve mollusc from Peru due to hepatitis A.
12. Feed and food from Japan following the accident at the Fukushima nuclear power station.
13. Rice products from China for unauthorised genetically modified rice.

Where a known or emerging risk to health is identified, feed and food products may be subject to additional import controls under Commission Regulation (EC) No. 669/2009 (as amended).

Additional controls also apply to imports of polyamide and melamine plastic kitchenware from China, including Hong Kong.

How do we learn from experience?

All incidents notified to us are reviewed. Routine reviews of incidents may generate lessons learnt, which will be recorded and shared within our department. Lessons are recorded on a rolling basis and combined, where appropriate, with lessons learnt from exercises carried out to test our responses to emergency scenarios.

A number of incidents, a maximum of six each year are selected, for a wider, formal internal and/or external review. As part of this process we will actively seek the views of key stakeholders involved in the incident, looking at key issues such as communications, roles and responsibilities, overall management, proportionality and root cause to establish best practice and learn lessons for the future. We revisit our procedures in the light of these reviews to ensure that lessons are embedded into our Incident Response Protocol.

Further details of our incident review procedures and of specific reviews FSA has carried out over the years are available at:
food.gov.uk/foodindustry/incidents/monitorprevent/reportsreviews/

Appendix 4

How can you get in touch with us?

Incidents Branch

The Incidents Branch acts as the central hub for our food and feed incidents work. It maintains the official audit trail for the investigation, co-ordinating the logging, collation and distribution of information required during the investigation. The Branch arranges the issue of food alerts to local authorities, other government departments, trade organisations and other interested parties and RASFF notifications to the Commission.

Contact details for the Incidents Branch:

Incidents Branch

Food Standards Agency
Aviation House
125 Kingsway, London
WC2B 6NH

tel: 020 7276 8448
fax: 020 7276 8788
Email (all incidents):
foodincidents@foodstandards.gsi.gov.uk

Food Incidents should be reported using an incident report form located at:
food.gov.uk/incident-report-form

Out of office hours contact should be made through the Defra Duty Room:
tel: 0845 051 8486
fax: 0845 051 8487

The Defra Duty Room will contact the appropriate officer 'on-call' in the Incidents Branch.

Food Fraud Team

The Food Fraud team is committed to providing local authorities with support when tackling food fraud, which includes any deliberate illegal activity relating to the supply of food or feed. The team provide the resources to all UK local authorities when tackling known or suspected food fraud:

Contact details for the Food Fraud Team:
Food Fraud
Food Standards Agency
Aviation House
125 Kingsway, London
WC2B 6NH

tel: 020 7276 8242
fax: 020 7276 8788
email:
foodfraud@foodstandards.gsi.gov.uk

Local authorities are asked to submit intelligence on a '5x5x5' Information/Intelligence Report form. This is a standard format used by enforcement agencies for managing the evaluation, the source and the origin of information, and the way in which it should be handled and disseminated. The form can be found at:

food.gov.uk/multimedia/worddocs/nffdintelligencereportform.doc

Out of office hours contact should be calling the Food Fraud Hotline (answerphone) on 020 7276 8527.

Radiological Team

email:
radiation@foodstandards.gsi.gov.uk

We have offices in Scotland, Wales and Northern Ireland which take responsibility for co-ordinating incidents and food fraud investigations in their areas. Any issues relating to food in these areas will be led by the devolved office concerned.

FSA in Scotland

6th Floor, St Magnus House,
25 Guild Street, Aberdeen
AB11 6NJ
tel: (01224) 285 194/196
email:
scottishincidents@foodstandards.gsi.gov.uk

Out of hours telephone: 07881 1516867

FSA in Wales

11th Floor, Southgate House
Wood Street, Cardiff
CF10 1EW
tel: 029 20 678961
email:
wales.foodincidents@foodstandards.gsi.gov.uk

Out of hours telephone: 07789 926573

FSA in Northern Ireland

10a–10c Clarendon Road
Belfast
BT1 3BG
tel: (028) 9041 7700
email:
incidents.ni@foodstandards.gsi.gov.uk

Out of hours telephone: 07884 473022

Appendix 5

Glossary of terms

AZA	Azaspiracid toxin
BIP	Border Inspection Post
DAP	Data Analysis Project
DSP	Diarrhetic shellfish poisoning
EC	European Commission
EFSA	European Food Safety Authority
ER	Emerging Risks
EU	European Union
FAFA	Food Alert For Action
FBO	Food Business Operator
FCO	Foreign and Commonwealth Office
FEPA	Food and Environment Protection Act (1985)
FSA	Food Standards Agency
GRAIL	Guidance and Regulatory Advice on Import Legislation
HPA	Health Protection Agency
HUS	Haemolytic Uremic Syndrome
IRP	Incident Response Protocol

LA	Local Authority
LOCOG	London Organising Committee of the Olympic and Paralympic Games
OCT	Outbreak Control Team
PAA	Primary aromatic amines
PAH	Polycyclic aromatic hydrocarbons
PHA	Port Health Authority
RASFF	Rapid Alert System for Food and Feed
RCA	Root Cause Analysis
RIN	Recall Information Notice
SLB	Single Liaison Body
VTEC	Verocytotoxin producing *Escherichia coli*
WIN	Withdrawal Information Notice

Stay up to date

For more information and advice about food, visit the Food Standards Agency website:
food.gov.uk

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