



new scientific committee appointed

The Tánaiste and Minister for Health and Children, Mary Harney T.D. has appointed the new FSAI Scientific Committee, following consultation with the FSAI Board. The Committee, which has a term of five years, provides scientific advice and expertise on all aspects of food safety and nutrition. It advises the FSAI on scientific and technical matters relating to food safety and hygiene which underpins the FSAI's regulatory decisions and the enforcement of food legislation in Ireland.

The Committee comprises 15 members with expert advice and knowledge which is paramount for sound science-based decisions and actions to be formulated. It will be chaired by Professor Albert Flynn who will bring a wide European dimension to the Committee, drawing upon his knowledge as a member of the European Food Safety Authority's Scientific Committee.

The members of the Scientific Committee are;

Chair

- Professor Albert Flynn, Department of Food and Technology, University College, Cork; FSAI Board Member and Member of the European Food Safety Authority's Scientific Committee.

Members

- Dr Catherine Adley - Department of Chemical & Environmental Sciences, University of Limerick
- Ms Paula Barry-Walsh - Department of Agriculture and Food
- Prof Dan Collins - Faculty of Veterinary Medicine, University College, Dublin and Member of European Food Safety Authority's Scientific Committee

- Dr Eibhlín Connolly - Department of Health and Children
- Professor Martin Cormican - Bacteriology Department, University College, Galway and University College Hospital, NUI Galway
- Dr Mary Flynn - Consultant Public Health Nutritionist, FSAI
- Dr Philipp Hess - Marine Institute
- Professor Colin Hill - Department of Microbiology, University College, Cork
- Mr Cathal Kearney - Health Service Executive - Western Area
- Dr Mark Lynch - Pesticides Control Service, Department of Agriculture and Food
- Professor Brian McKenna - Faculty of Agriculture, University College, Dublin
- Dr Paul McKeown - Health Protection Surveillance Centre
- Dr Michael O'Keeffe - National Food Centre, Teagasc
- Professor Michael Ryan - Department of Pharmacology, University College, Dublin



*Mr Alan Reilly, Deputy CEO, FSAI
pictured with Professor Albert Flynn,
Chair, FSAI Scientific Committee.*

fsai news

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working together towards a common goal



Maximising effectiveness through collaboration. That is the goal. The goal of a seamless national food safety inspectorate remains central to the philosophy of the Food Safety Authority of Ireland (FSAI). Embodied in that philosophy is the notion that every element in the inspectorate should have a well-defined role and operate transparently and in co-operation with the other parts of the inspectorate. There should be independent reviews of services and accountability at all levels. Resource requirements, the actual resource allocated and deployed, and any possible consequences for the health of the consumer should be clearly communicated. The FSAI is charged with the responsibility of keeping the food inspection services under review. A goal of such reviews is to explore "the scope for better co-ordination and delivery of the food inspection service or services" (Section 17 of the FSAI Act, 1998). Measurement is the first step in continuous improvement. As Lord Kelvin so aptly put it; "If you cannot measure it, you cannot improve it."

Detailed reviews are not always necessary to spot a problem. The number of vacant posts in the Environmental Health Service in some parts of the country is a concern, but progress is being made. In 2004, the FSAI made representations to health boards. Some posts were filled and it is hoped that in time all posts will be filled. While the situation persists, there will be local inconsistencies in the level of food control achieved. Our efforts will continue to ensure that agencies are able to offer an appropriate service. A basic goal should be that controls experienced by food premises are in proportion to the likely risk. There is no substitute for effectiveness on the ground and vacant environment health officer posts need to be filled to ensure that we fulfill our mission.

"The start of a new year is a good time to take stock of where we are on the journey to our goals."

The start of a new year is a good time to take stock of where we are on the journey to our goals and to determine what we should do to take us closer to them. I am totally committed to the spirit of openness enshrined in the FSAI Act (1998) and have proposed review of performance at all levels as a key objective for 2005. In other words, "How are we doing?"

How are we doing on food hygiene? It's improving all the time, but there is still a way to go. Getting HACCP implemented in catering outlets is a challenging task. I had much opportunity while living in France to

reflect on the frequently expressed view that consumer protection is better served by trained and experienced staff than a HACCP plan. Not an unexpected view in a country occasionally sceptical of systems originating in the USA. But *vive la difference!* There is a point. Systems alone are not the solution and know-how without a food safety management plan is equally weak.

We are fortunate in Ireland that we have enthusiastic people at all levels prepared to challenge our assumptions and look at better ways of getting the job done. That dialogue and debate are indispensable. Dialogue with those at the coalface is especially important as I am keen to remove any barriers to achieving maximum protection for consumers. In conjunction with the review process and to better identify the opportunities for improvement, I am committed to spending time at the coalface myself in 2005. Finally, national meetings planned by the FSAI for the second half of 2005 will offer the opportunity for all those involved in official food control to meet and share experience.

*"Tell me and I will forget
Teach me and I will remember
Involve me and I will learn"*

Benjamin Franklin

Dr John O'Brien

Chief Executive, FSAI

visitors from slovenia

The Food Safety Authority of Ireland (FSAI) has been collaborating with the food control authorities, trade associations, retailers and Ministry of the Economy in Slovenia in developing a guide to good hygiene practice for the retail sector. In January, the working group visited Ireland to learn first hand how Irish retail and wholesale sectors manage food safety and how the FSAI and the official agencies operate. The visit was supported by the European Commission's TAIEX office.



Pictured here on a visit to Musgrave's Central Distribution Centre in Cork in January are:
Back row (l-r): Janez Rogelj, Cathriona Nolan, FSAI, Vesna Veljanovski-Geramia.
Centre row (l-r): Marko Rozman, Ziga Potocnik, Barbara Koci, Dorothy Guina-Dornan, FSAI.
Front row (l-r): Alenka Novak, Jozica Krajsek, Mija Lapornik, Zvezdana Zurman.

what you thought of our newsletter

In late 2004, the Food Safety Authority of Ireland (FSAI) carried out a survey to determine what you, our readers thought of our newsletter, *fsainews*. Overall 172 readers participated in the survey, with 131 completing it online via our website and 41 completing and returning a hardcopy version of the questionnaire. We would like to sincerely thank all of you who responded.

Of the respondents, quality control personnel and environmental health officers were the most common occupational groups participating in the survey. Almost half (49%) of all respondents have been receiving *fsainews* for less than one year, with 39% receiving it for between one and three years, and 12% receiving it for more than three years.

Almost all respondents (98%) felt that the newsletter is a useful and informative resource on food safety issues. Of the various topics listed, 'current food safety issues' was deemed to be either 'very useful' or 'useful' by 97% of respondents, with 95% citing that topics relating to 'legislation updates' were either 'very useful' or 'useful'. At the other end of the spectrum, 77% found topics relating to 'audit reports' either 'very useful' or 'useful'. (Table 1)

Table 1: How useful would you score the following *fsainews* topics? (n=all respondents)

	Very useful	Useful	Not Very useful	Not at all useful	Combined useful scores
	%	%	%	%	%
Current food safety issues	73	24	3	3	3
Legislation updates	58	37	5	5	5
Information on FSAI publications	43	51	6	6	6
Labelling information	50	40	9	9	9
Agency news	26	58	15	15	15
Updates on events/conferences	32	52	14	14	14
National surveillance programmes	32	52	16	16	16
Training information	32	48	20	20	20
Audit reports	27	50	23	23	23

When asked to choose from a list of topics, just under half (46%) said that 'current food safety issues' were of most interest to them (Figure 1).

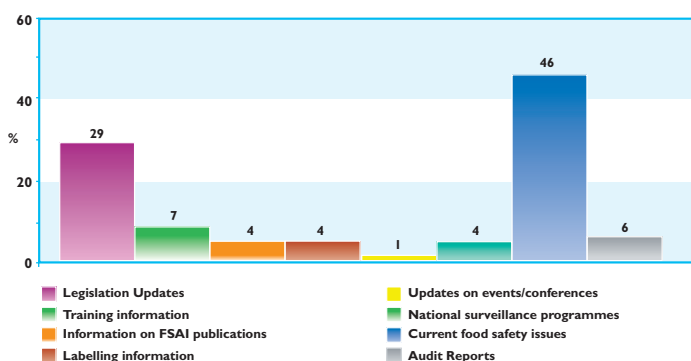


Figure 1: Topic of most interest

Table 2: Views on the design and layout of *fsainews*

	Excellent %	Good %	Fair %	Poor %	Very Poor %
Clarity of information	50	47	3	1	-
Relevance of information to your business	32	48	19	1	-
Volume of content	15	61	23	1	1
Layout and design	30	54	12	3	1
Graphical content	26	49	20	4	2
Readability	31	55	13	1	1
Style	36	56	8	1	1

Almost all respondents (97%) rated the clarity of information in the newsletter as either 'excellent' or 'good', with style rated by 92% as either 'excellent' or 'good'. Conversely, graphical content was rated as either 'excellent' or 'good' by 75% of respondents. (Table 2)

Overall 33% rated *fsainews* as 'excellent', with 61% rating it as 'good' and 6% rating it as 'fair'. None of the survey respondents rated the newsletter as either 'poor' or 'very poor'.

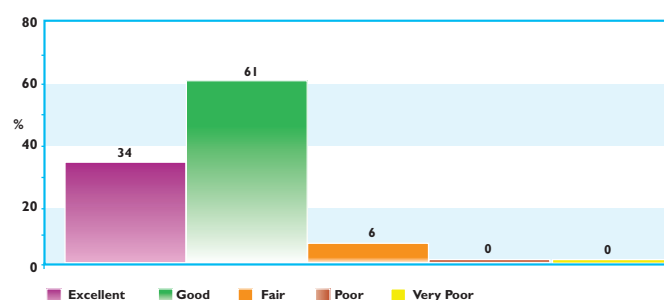


Figure 2: How respondents rated the newsletter

The current method of receiving the newsletter was found to influence preference for receipt, with 80% of those who currently receive it by post, favouring this option. Similarly, 87% of those currently receiving the newsletter by email, favoured this distribution option, with a similar pattern of response reported by those currently receiving the newsletter via the website (75%). If you are a recipient of the newsletter and you would like to change the way in which you receive it, please let us know by calling 1890 33 66 77 or emailing: info@fsai.ie.

In addition, 26% of respondents identified other topics that they would like to read about in the newsletter and 42% listed a single thing they considered most likely to improve the value of the newsletter. These responses are extremely useful and will be taken into consideration in future newsletters.

To express our gratitude to those who took time to participate in the survey, all respondents were entered into a draw for a €300 voucher from the 'Gift Voucher Shop'. Congratulations to Mary Jordan, Senior Area Medical Officer, HSE, Western Region, who was our competition winner.

Any comments or suggestions in relation to our newsletter are very welcome at all times and are much appreciated.

discovery of furan in food

Furan is a simple oxygen-containing chemical which is used in industry in chemical syntheses. It has also been reported to occur naturally in a variety of environments including, on occasion, in food and drinks. The chemical structure of furan is shown in Figure 1.

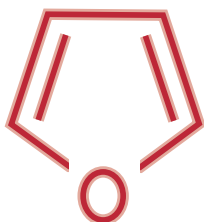


Figure 1: Chemical Structure of Furan

In May 2004, following the development of a new, more sensitive analytical method for detecting furan in food, scientists at the US Food and Drug Administration (FDA) reported the occurrence of furan in a much wider range of foods than previously known, and at lower concentrations. Foods containing furan included coffee, juices, baby food, spaghetti sauces, canned soups, creamed corn and baked beans. Preliminary findings suggested that furan was being formed during the processing of food involving the heating of sugars and carbohydrates; there were therefore similarities with the discovery in 2002 of acrylamide in food as a result of heating starchy food at high temperatures. Like acrylamide, furan has been shown to cause cancer in animals and it has been classified by the International Agency for Research into Cancer as possibly carcinogenic to humans. Its discovery in a wide range of foods therefore raises health concerns.

Advice from EFSA

Following the publication of the initial FDA report, the European Food Safety Authority's Scientific Panel on Contaminants in the Food Chain (CONTAM) established a working group to examine the formation and occurrence of furan in European food and the potential exposure of European consumers through food. It also reviewed the available data on its toxicity and the methods for its analysis. European food safety authorities and industry were requested to provide EFSA with any information on the presence of furan in food in order to inform the review process. The EFSA Panel published its initial findings in December 2004, reporting levels of up to 195ug/kg (parts per billion) in foods such as coffee, beer, honey, canned or bottled vegetables, meat products and baby food. Results of analyses carried out on 273 baby food products showed levels of furan ranging between non-detectable and 112ug/kg, and the EFSA panel used these data to derive an intake of furan by a six-month old baby (7.5 kg weight) of between <0.03 to 3.5ug/kg per day. The EFSA report is available at: http://www.efsa.eu.int/science/contam/contam_scientific_documents/catindex_en.html.

No safe levels in foods

The Panel concluded that furan was clearly carcinogenic to rats and mice, noting that it produced tumours of the liver (cholangiocarcinomas) even at the lowest levels tested in the toxicology studies. It also caused leukemia in exposed rats. It concluded that there was a relatively small difference between the estimated exposure

levels in humans and doses in animal studies that produced carcinogenic effects. The available evidence indicates that furan is probably producing tumours by a genotoxic mechanism, although its toxic effects in the liver are likely to be a contributing cause. It thus falls into the class of chemical for which scientific opinion indicates that no safe level can be reliably identified in food. Levels in food should therefore be as low as reasonably achievable (the "ALARA" principle). EFSA has concluded however that the toxicology database on furan is incomplete, and that the data on occurrence and mechanisms of formation and destruction are only of a preliminary nature. It does not consider that any conclusions can be drawn about the possible risk of furan in certain foods, and it identifies the need for further research into occurrence and formation of furan in a wide variety of food and food products, the fate of furan as a result of food processing, the toxicity of furan including mechanistic aspects, and data on regional food consumption patterns in Europe.

FSAI action

The FSAI will continue to monitor the available information on furan in food, including determination of furan in Irish food by the public analysts' laboratories. The FSAI endorses the EFSA view that the available data are insufficient to draw conclusions about risks to human health risks arising from consumption of food containing furan and that consumers should not change their dietary habits as a result of these preliminary data.

train the trainer

During 2004, over 70 food businesses participated in and completed the Food Safety Authority of Ireland (FSAI) two day train-the-trainer programme. On completion of the programme, in-company trainers are equipped with the necessary skills to confidently deliver the three hour "Food Safety and You" induction training course.

The following is feedback from industry representatives who took part in the train-the-trainer programme:

"I will be able to carry out efficient training in a more confident, interesting and professional manner."

"It simplifies what new employees need to know and how to deliver the three hour course in a clear and concise way."

"Well worth doing - will play a vital role in the workplace."

"Excellent course for the workplace and will keep trainees active through the interactive games and video."

The 2005 spring schedule of workshops is as follows:

Date	Location
22nd and 23rd February	Crowne Plaza Hotel, Santry, Dublin
1st and 2nd March	Crowne Plaza Hotel, Santry, Dublin
5th and 6th April	Galway Bay Hotel, Galway
12th and 13th April	Maryborough House Hotel, Cork
19th and 20th April	Crowne Plaza Hotel, Santry, Dublin

The cost of the programme is €250 per applicant, which includes the training materials required to deliver the induction course. (There is an additional cost for the trainees' workbooks as each business will require varying amounts.)

For further information or to obtain an application form, please contact Inez Walsh at iwalsh@fsai.ie, or on 01 8171348.

the national haccp strategy - three years on

The three year term of the FSA/Health Board HACCP Strategy came to an end December last. Much has been achieved during the three years, while a considerable amount of follow-on work is planned. The HACCP Steering Committee is being renewed, with a call to each of the former health boards to nominate members. One of the principal jobs of the new committee will be to review and update the strategy to ensure its relevance to our current situation.

The original strategic goal was to:

"Bring about a significant increase in the number of food businesses that implement a food safety management system based on the principles of HACCP by the end of 2004".

This was to be achieved through six objectives. Taking each of the objectives in turn, the following is a summary of work to date:

1) To aggressively **promote** HACCP at national and regional level:

A national media campaign was run in the summer and again in the autumn of 2003 which focused on highlighting the importance of temperature control. Advertisements appeared in the business section of national newspapers, specifically targeting food business owners, as well as in various trade magazines. Many of the magazine advertisements were supplemented with articles on HACCP.

2) To **demystify** the concept of HACCP:

In order to demystify the concept of HACCP and its related terminology three generic booklets were produced:

- What is HACCP?
- HACCP Terminology Explained
- How to Select an External HACCP Consultant

To assist businesses specifically targeted under the strategy, two sector specific guides were produced - 'HACCP in Catering' and 'HACCP in Butcher Shops/Meat Counters'.

3) To develop a **targeted** approach to ensuring full compliance:

The target groups, approximate number of businesses covered and the target time periods are summarised in Table 1.

Table 1: Summary of targets and time periods

Target Business	Approximate No. of Premises	Target Period
Hotels with function catering	600	January 2003 to end December 2003
Hospitals	200	January 2003 to end June 2004
Nursing Homes	300	January 2003 to end June 2004
Butcher Shops & Meat Counters	1,000	August 2004 to end August 2005
Restaurants with >50 seats	1,500	Expected to start mid 2005

4) To facilitate the development of an enhanced role of **industry** in its own development of HACCP:

During the past three years the FSA industry fora (Retail Forum, Food Service Forum and more recently the Artisan Food Producers Forum) have liaised with the HACCP Steering Committee and contributed to the development of the various guides. Additionally, the trade associations on the industry fora have been working to help their members help themselves.

5) To develop a **consistent** approach to implementation and enforcement of HACCP:

The primary focus of this objective has been consistency in assessing compliance with the HACCP based element of the European Communities (Hygiene of Foodstuffs) Regulations, 2000 (S.I. No. 165 of 2000). FSAI Guidance Note No. 11 - Assessment of compliance with the HACCP based element (Regulation 4.2) of the European Communities (Hygiene of Foodstuffs) Regulations, 2000 (S.I. No. 165 of 2000) (Revision 1) (2004), was produced in 2002 and reviewed and updated during 2004.

6) To develop and implement an accurate **measure** of the success of the strategy:

The measure of success of the targeted approach required considerable work on the part of environmental health officers. For the first three target groups (hotels with function catering, hospitals and nursing homes) a baseline, interim and final assessment was conducted. To date, a baseline assessment has been conducted for the butchers while only a final assessment is planned.

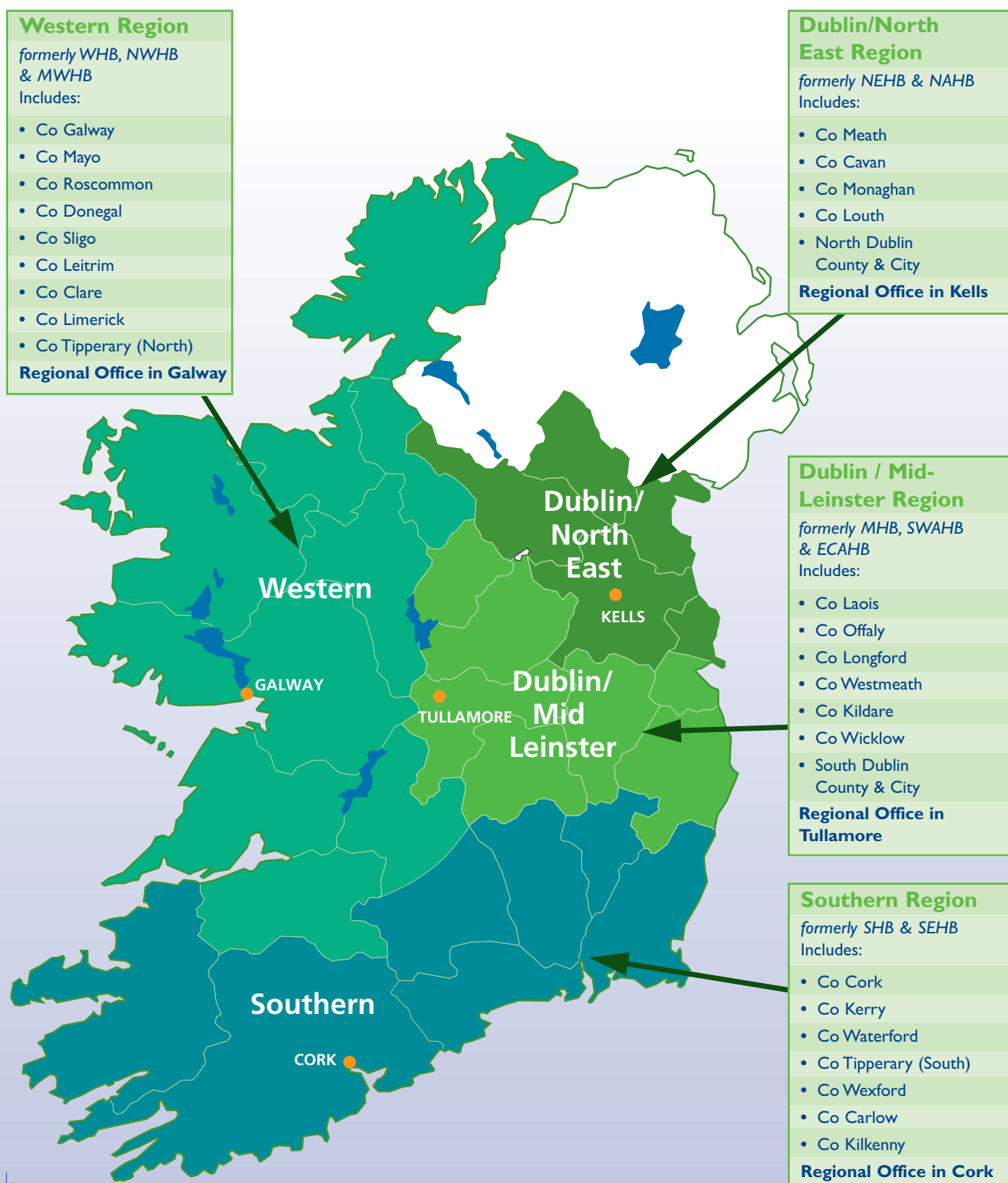
In conclusion, the value of the strategy has been demonstrated by the doubling in the level of compliance in the hotels with function catering target group, with preliminary analysis of the final assessment for hospitals and nursing homes suggesting a similar increase in their level of compliance.



health service executive

On 1st January 2005, the health boards were officially dissolved and replaced by a single body, the Health Service Executive (HSE). The central corporate executive is based in Naas, Co. Kildare and there are four administrative regions, namely, Galway, Cork, Kells and Tullamore. Figure 1 indicates the make-up of each of the regions by county and by former health board.

HSE Regional Organisation



bse found in goat

Transmissible Spongiform Encephalopathies (TSEs) are a family of diseases occurring in man and animals, characterised by a degeneration of brain tissue giving a sponge-like appearance. The family includes diseases such as Creutzfeldt Jakob Disease (CJD), Bovine Spongiform Encephalopathy (BSE) and scrapie. Until now BSE has never been found under natural circumstances in ruminants other than cattle; however the presence of the BSE infection has recently been discovered in a goat.

Background

A healthy goat, slaughtered in France in 2002, was tested at random for TSEs. Based on an initial positive finding of a TSE which differed from the normal scrapie profile further scientific studies were carried out, leading to the conclusion by French experts that the brain could be BSE positive. In October last, the EU Commission submitted data received from the French authorities to the Community Reference Laboratory for TSEs in Weybridge, England, for evaluation by an expert panel. The panel has now completed its investigation and the presence of BSE in the animal in question has been confirmed. The presence of BSE in goats or other small ruminants had been viewed as theoretically possible but was never previously detected. Experimentally, BSE has been transmitted to sheep.

While BSE has only recently been identified, scrapie has been known for centuries and on the basis of the available data, it is not considered to pose a risk to man. However, as a precautionary measure, EU legislation in place to prevent the spread and transmission of BSE applies also to sheep and to goats.

Monitoring and Precautions

Since BSE was discovered in cattle, an extensive monitoring and surveillance regime for TSEs by the Department of Agriculture and Food has also been in place for sheep and goats. Monitoring and passive surveillance of the sheep and goat population for the presence of TSEs has been an EU requirement since 1998 and scrapie is a notifiable animal disease since 1993. In January 2002, active sample surveillance using the TSE-rapid test was introduced on healthy slaughter animals, and risk animals over the age of 18 months. It utilises the same tests as used for BSE-testing in cattle, since those are designed to recognise TSEs. The level of testing was greatly increased from 1 April 2002. Every year about 350,000 sheep and 50,000 goats are tested resulting in the monitoring of over one million since 2002.

The goat population in the EU is relatively small; 12.7 million goats in comparison with 89.2 million sheep in 2003. The majority of goats are in Greece (5.3m), Spain (2.9m), France (1.2m), Italy (1.0m) and Portugal (0.5m). In 2003, 63,000 goats were tested and there were 46 positive cases; 19 in Greece, 19 in France, 6 in Italy and 1 each in Spain and the UK.

From now on, all TSE positives in sheep and goats will be subjected to a screening test which will indicate whether the positive case is due to scrapie or BSE.

In addition, increased surveillance of goats will mean that 200 fallen goats must be tested annually in Ireland for TSE.

Scientists have also followed the issue of BSE in sheep and goats closely, since it is known that sheep and goats were partially fed during the 1980s and early 1990s with feedstuffs containing the same type of contaminated meat and bone meal (MBM) that was responsible for causing the spread of BSE in cattle. It has also been known for some time that a BSE-like disease can be experimentally transmitted to sheep by feeding them material derived from the brains of BSE-affected cows.

Rigorous and extensive legislation has been adopted at EU level to prevent the spread and transmission of BSE among cattle. Many of these measures are also applied to goats and sheep, as an additional safety measure.

Risk involved in the consumption of goat products

Following the findings of the research group in France last October, the European Food Safety Authority (EFSA) undertook an initial assessment of the risks involved in the consumption of goat products. It subsequently advised that based on current scientific knowledge, milk and products derived from the milk of healthy goats are unlikely to present any risk of TSE contamination. SRM is required to be removed from goats slaughtered at abattoirs. Currently, as a precautionary measure, milk and meat from herds which are affected by a TSE case, cannot be used according to EU legislation. On this basis, no change in current consumption of milk, cheese and meat is advised. However, EFSA will give further consideration to the meat aspect.

The situation in Ireland

The goat population in Ireland is approximately 17,000. These goats are used mainly for milk and cheese production and no abattoirs are approved for the slaughter of goats. A number of samples from goats have been tested recently for TSEs and all have given negative results.

In addition, Ireland is due to introduce an identification system for goats in July, as required by EU legislation, as well as undertaking additional surveillance on goats as agreed following the EU Commissions evaluation of EFSA's recent scientific opinion.



msc european regulatory affairs

- fsai & fsani jointly present first prize



Pictured are graduates of the first Master of Science in European Food Regulatory Affairs.

In December 2004, the first graduation of the Master of Science (MSc) in European Food Regulatory Affairs took place in the Millennium Forum, Derry. The Food Safety Authority of Ireland (FSAI), and the Food Standards Agency Northern Ireland (FSANI) were delighted to jointly present a prize to Kevin Phelan (Northern Ireland Assembly), the student who received first place in the class of 2004. Furthermore, we are proud to

congratulate Anne-Marie Boland, Senior Technical Executive in Regulatory Affairs, FSAI, who also graduated from this course along with Ian Brassil, Tom O'Hanlon and Richard Howell (Department of Agriculture and Food), Clíodhna McDonough (Goodbody, Dublin), Tara Cannell (ICON, Dublin) and Louise McAleer (Bangor, Northern Ireland).

The MSc. in European Food Regulatory Affairs is delivered online by the University of Ulster, in collaboration with Trinity College Dublin and University College Cork (The Irish Universities Nutrition Alliance: www.iuna.net) and is aimed at those working in private food companies, Government departments or agencies.

This is the first degree course in Ireland to offer formal training in European Food Regulatory Affairs, and the FSAI and FSANI are eager to promote high standards by offering this prize in future years.

Dr John O'Brien, Chief Executive, FSAI, who was appointed external examiner to the training programme prior to taking up his present post said that "the course is a perfect example of what can be achieved on an all-island basis to create a culture of excellence in food safety, nutrition and food regulatory affairs. The course harnesses synergies between universities North and South to create a unique course with broad international participation."

certificate in seafood technology

A new innovative Certificate in Seafood Technology, developed by the Food Industry Training Unit, Faculty of Food Science and Technology, University College Cork (UCC), in conjunction with the Department of Communications, Marine and Natural Resources (DCMNR) was formally launched on January 10th. The National University of Ireland certificate, for the national seafood safety inspectorate, is accredited through the Centre for Adult Continuing Education, UCC.

Seafood inspectors are responsible for the inspection of aquaculture bays, fishing vessels, factory vessels, seafood processing units and Border Inspection Posts throughout the country to ensure that all operations are complying with legislative

requirements. The inspectors, based in Killybegs, Rossaveal, Castletownbere, Dingle, Dunmore East, Cork, Howth and

Leeson Lane headquarters, will take the course in Cork over two-day sessions from January to November 2005.



Pictured at the launch are: (l-r): Andrew Kinneen, DCMNR; Dr Cecil Beamish, DCMNR; Peter Whelan, FSAI; Maura Conway, UCC; Denis Staunton, UCC; Paul Ward, DCMNR and Prof Yrjo Roos, UCC.



enterobacter sakazakii:

an emerging public health risk

Enterobacter sakazakii (*E. sakazakii*) is a pathogenic bacterium which has emerged as a public health problem in recent years. The current name of this bacterium was adopted in 1980 and hence readers may not be familiar with it (formally called 'yellow pigmented' *Enterobacter cloacae*).

The bacterium has been associated with a number of outbreaks of infection, usually meningitis, in premature neonates (infants up to 28 days old), with high rates of morbidity and mortality. Although infection can occur in older infants, children and adults, it is with a much reduced frequency and severity. By the end of 2003 there were approximately 50 reported cases in infants less than 60 days old where three-quarters had low birth weight (<2.5kg) and three-quarters were premature (<37 weeks gestation). Therefore, among infants, those at greatest risk of infection are neonates, especially those who are pre-term, with low birth weight or immunocompromised. Outbreaks of *E. sakazakii* infection in 2004 include the death of a pre-term infant in July in New Zealand, and an outbreak in France from October to December involving 10 cases of infection in premature or low weight neonates resulting in two deaths.

“Whilst measures are taken to keep the environment clean during these operations, current technology does not allow for the production of sterile powders.”

E. sakazakii has been detected in various types of food, but powdered infant formula powder is becoming the most important vehicle of infection. In several investigations the same bacterium has been isolated from neonates and unopened cans of infant formula powder used to feed the neonates.

Perceptions amongst the public are that infant formula powder is sterile, but this is not the case. The raw ingredients for infant formula receive some heat treatment to kill pathogenic bacteria but not enough to kill the more heat resistant bacterial spores. In the manufacture of powdered infant formula, liquid milk formula is also dried and packed. Whilst measures are taken to keep the environment clean during these operations, current technology does not allow for the production of sterile powders. *E. sakazakii* most likely contaminates the powder after heating during powder drying and filling before the cans/pouches are sealed. Also, *E. sakazakii*

appears to be more resistant to osmotic and dry stress than other species and is well adapted to survival in infant formula powder.

The handling by parents and health workers/care workers often pre-supposes the sterility of the powder. Formula powder is often reconstituted with cold pre-boiled water and left for extended periods at room temperature. Since *E. sakazakii* has been reported to be infectious at low numbers, these practices are more likely to result in infection should the bacterium be present in the infant formula powder.

reducing the risk

In order to reduce the risk of infection the following recommendations have been made:

- Whenever possible exclusive breastfeeding should be undertaken for the first four to six months of life;
- Parents and people responsible for infant care should be regularly alerted to the fact that powdered infant formula is not a sterile product;
- In hospitals and care settings, if breast feeding is not possible, people responsible for care of high risk infants are encouraged to use commercially sterile liquid formula. This is especially important for premature and low birth weight neonates.
- If powdered infant formula is used either in a care setting or at home the FSAI recommends the following:
 - Reconstitute the powdered infant formula with boiled water that has been cooled slightly below boiling point. Then allow it to cool to feeding temperature before feeding.
 - Heat reconstituted formula to a high temperature before allowing it to cool to feeding temperature.
 - Reduce the time between the reconstitution of the formula and the start of feeding as much as possible but ensure that the formula is cool enough to feed safely.
 - Reducing the length of feeding times as much as possible.
- To achieve the greatest impact, a combination of these control measures should be used.

international action

The FAO/WHO Codex Alimentarius Commission sets international standards for food. The current Codex advisory microbiological specifications for powdered infant formula limit the amount of coliform bacteria, which includes *E. sakazakii*, to 1-10 per gram of formula. While this limit probably helps to reduce the number of outbreaks, it does not provide a sufficient level of safety as evidenced by outbreaks caused by powdered formula which meets the current specifications. Given new information on this emerging problem, a recent expert meeting recommended that Codex revise the international standard to better address the microbiological risks of powdered infant formula, including establishing a microbial specification for *E. sakazakii*.

Codex guidance will also cover hygiene requirements specific to the manufacturing of powdered products using different technological processes, as well as hygiene related to the plant environment during production. It will also provide labelling guidance for consumers for handling and storing of the product after the reconstitution.



new year - new regulations

Track Record

Traceability has long been a buzzword in food safety. Claimed as the antidote to food scares, it is also heralded as a prerequisite for confidence in the food supply. After all, the world is now a smaller place and seasonality as it relates to food on the supermarket shelves is long gone. Where once spices made the long trek by camel train from the East, now new potatoes and strawberries arrive on our tables from the far side of the world less than a day after they were picked. A quick check on the food in our shops will reveal how much more multicultural we have become. Green beans and artichokes are flown in fresh from Kenya. Cherries arrive from Tasmania, chicken from Thailand and beef from Brazil. As for processed food, it is often more accurate to say it was assembled in one place from components drawn from all over the globe, than to suggest a single country of origin. Equally, Irish products traverse the world in the form of international brands or sought after commodities.

Traceability is however, much more than a buzzword. It is an essential component of modern food control systems and since 1st January it is now the law. There are two consequences to this new situation. Firstly, all food businesses have to adapt and develop the necessary systems in order to comply and secondly the food inspectorate has to begin checking that such systems are in place.

The provisions on traceability are contained in EC Regulation 178/2002 on the general principles of food law. Although the Regulation has been in place for more than three years, only in January 2005 did Articles 11, 12 and 14-20 apply.

Traceability rules are detailed in Article 18 which requires food business operators:

- to be able to identify from who and to whom a product has been supplied;
- to have systems and procedures in place that allow for this information to be made available to the competent authorities upon demand.

The requirement relies on the 'one step back - one step forward' approach. Internal traceability within a business, such as linking incoming batches of ingredients to outgoing batches of products, while both good practice and highly desirable, is not a legal requirement. Information on supplies to a final consumer, such as occurs in the retail setting are not required.

Total Recall

Even in the best food operations failures can occur, and withdrawals and recalls are often necessary. Effective recalls depend on good traceability systems. Just as traceability is now a legal requirement, so too is withdrawal. Put simply, food business operators must initiate the withdrawal of

"Even in the best food operations failures can occur, and withdrawals and recalls are often necessary."

foods which do not meet food safety requirements and notify the competent authority (e.g., the FSAI or official agency) of the withdrawal. Where the affected food may have reached the consumer, it is necessary to inform consumers and to recall the food from those who may have received it. Broadly speaking there are two triggers for initiating a withdrawal; 1) that

the food may be unsafe and/or injurious to health and 2) that it has left the immediate control of the initial food business. Article 19 of Regulation 178/2002 sets down the requirements. Some food business operators may well be inwardly horrified at the prospect of having to inform both the authorities and consumers, fearing an unrecoverable loss of profits and confidence in their brand. However, in experience, the opposite is the case. Timely and well managed recalls can increase consumer confidence and are much more preferable than the consequences of being exposed for failing to adequately protect consumers.

To help everyone involved to get to grips with the new rules, detailed guidance on traceability and withdrawal, as well as other aspects of the Regulation has been prepared by the European Commission. This is currently available on the DG Health and Consumer Protection website:

http://europa.eu.int/comm/food/food/foodlaw/guidance/index_en.htm

Similarly the FSAI has prepared answers to FAQs based on enquiries from food business operators. The FSAI has also issued two documents which are aimed at implementing best practice:-

- *Code of Practice No. 5: Food Incidents and Food Alerts*, which provides information for food business operators and official agencies on the exchange of information relating to food incidents, including withdrawals and recalls.
- *Guidance Note No. 10 - Product Recall and Traceability*, which provides detailed advice.

All FSAI publications are available from our website, www.fsai.ie, or by contacting the advice-line on 1890 33 66 77.

recent publications

The following publication has recently been produced by the FSAI:

• **Code of Practice No.5 - Food Incidents and Food Alerts (2005)**

The Code of Practice (COP), which will be of benefit to both the official agencies and food business operators, deals with the communication arrangements between food businesses, official agencies and the FSAI in connection with food incidents. The

workings of the EU Rapid Alert System for Food and Feed (RASFF) and the national food alert systems are explained.

The COP will assist food business operators in meeting the notification requirements under the provisions of Regulation 178/2002 which came into effect in January 2005 and which are also detailed in the document. A 'template' for notifications is also provided. In order to assist businesses in making the required notifications, an electronic notification form is also available on the FSAI website.

In conjunction with the publication of the COP, the FSAI will be reviewing the current circulation details of those who receive food alert notifications. Current contacts will be asked to confirm and update their details in order to continue receiving alert notifications. Anyone not currently receiving food alerts from the FSAI, but who may request to do so, can contact the FSAI by emailing rapidalert@fsai.ie or by calling Catriona Gorman on 01 8171378.

COP No.5 is available on our website or by contacting our advice-line on 1890 33 66 77.

advice-line: an overview of 2004



9,552 queries, giving an average of 796 per month. This is an increase of almost 11% on the total number of calls received in 2003.

Calls to the advice-line originate from a wide range of sources (Figure 1).

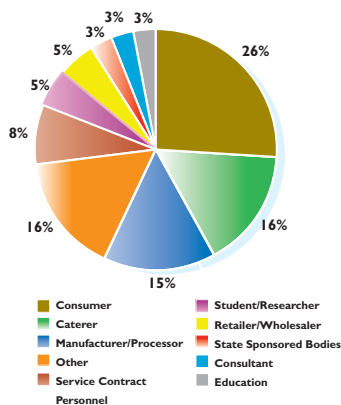


Figure 1: Caller Class, 2004

The FSAI's advice-line is a valuable resource for all interested parties to source information on food safety and have their queries answered. This resource enables the FSAI to promptly deal with queries while also monitoring issues of concern in the public domain. The FSAI primarily focuses its advice-line on dealing with consumer complaints, providing information and answering queries from all sectors of the food industry and staff of official agencies. The FSAI strives to assist industry to achieve good hygiene standards and comply with the law.

The advice-line is operated by trained advisors and food scientists and deals with a large number of calls on a daily basis. During 2004, the advice-line recorded a total of

Consumers represented the largest number of calls during the past year (26%), with caterers making up a further 16% and manufacturers/processors 15%. Other callers included service contract personnel, student/researcher and retailer/wholesaler to name but a few.

'Information requests' remained the largest category of calls to the advice-line during 2004 (31%), the requests being largely for FSAI publications, in particular the training guides and the HACCP booklets. The second largest category of calls to the advice-line was 'complaints' which accounted for 15% of all calls. Food labelling was the third most popular category with the majority of labelling queries coming from manufacturers/processors involved in labelling pre-packaged foods. (See Figure 2)

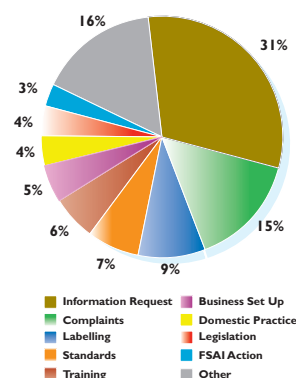


Figure 2: Calls by Category, 2004

The majority of food complaints are from consumers who need help because they have bought food that is unfit to eat, they have eaten in a food premises with questionable hygiene standards or they feel that they have become ill due to food they have eaten. Many callers are unaware of their rights as consumers and our staff advise them on the best course of action to take. This may cover the procedure they should follow when making a complaint and what they should do if they suspect they have food poisoning. A large number of these complaints were subsequently referred to the appropriate frontline agency for action. Of the 12 Health Boards to which complaints are referred, the Eastern Regional Health Authority was the recipient of most, with approximately 50% of all complaints referred to their offices.

The advice-line, on 1890 33 66 77 is open weekdays from 9am to 5pm. Alternatively, complaints can be made through a 'complaint form' on our website or we can be contacted by email at info@fsai.ie.

fvo programme of inspections, 2005

The EU Food and Veterinary Office (FVO) has published its 2005 programme of inspections. This consists of a detailed inspection programme for January to June and an outline programme for the second half of the year. A total of 138 inspections are planned for the first half of the year; 63% of inspections in Member States, 11% in candidate countries and the remaining 26%

in other third countries. The vast majority of inspections (90%) will relate to food safety and animal health, with the remainder focusing on plant health and animal welfare.

Ireland is scheduled to have two inspections in 2005. Sheep identification will be inspected in the first half of the year, and inspections on poultry meat and import

controls for animals and products of animal origin in the second half.

The programme is available on the European Commissions website: http://europa.eu.int/comm/food/fvo/inspect_prog/index_en.htm. As with previous years, adjustments to the plan may occur during the course of the year.



enforcement, 2004

In 2004, a total of 61 Enforcement Orders were served under the Food Safety Authority of Ireland (FSAI) Act, 1998. Closure Orders accounted for 69% of the total number of Orders served, while 18% were Improvement Orders and the remaining 13% Prohibition Orders (Figure 1). Enforcement Orders are served by authorised officers appointed by the FSAI or its official agents under Section 49 of the Act.

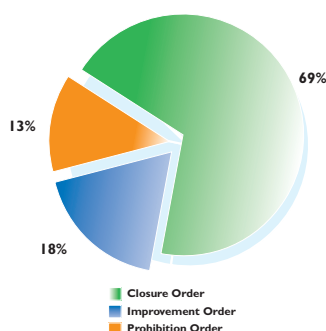


Figure 1: Types of Enforcement Orders Served, 2004

Overall, there was a 5% decrease in the total number of Enforcement Orders served in 2004 when compared with the 2003 figure (64 Orders). While the number of Improvement Orders decreased by 61%, increases in Closure Orders (17%) and Prohibition Orders (88%) were noted (Figure 2).

“Overall, there was a 5% decrease in the total number of Enforcement Orders served in 2004.”

On further analysis of the 42 Closure Orders served during 2004, 60% (25 Orders) were served to the ‘service sector’ business category and 24% to ‘retailers’. Of those served to the ‘service sector’, 40% were served to ‘restaurants/canteens’, 28% to ‘takeaways’ and 16% to ‘food stalls’

(caterer). The 24% served to ‘retailers’ represents an increase of 13% from 2003 and of these, ‘supermarkets’ received 40% and ‘grocery’ 30%.

While the number of Improvement Orders decreased overall, the most noticeable decrease in occurred in the ‘service sector’ (26 in 2003 compared with 9 in 2004), with 44% of these Orders served to ‘restaurants/canteens’, 22% to ‘takeaways’ and 22% to ‘hotels’. Prohibition Orders served in 2004 were distributed across all business categories with the exception of the ‘service sector’.

Figure 3 represents the distribution of Enforcement Orders by month in 2004. An average of five Orders per month were served.

For further information, see: <http://www.fsai.ie/enforcement/index.asp>



Figure 2: Enforcement Orders, 2003 Vs 2004

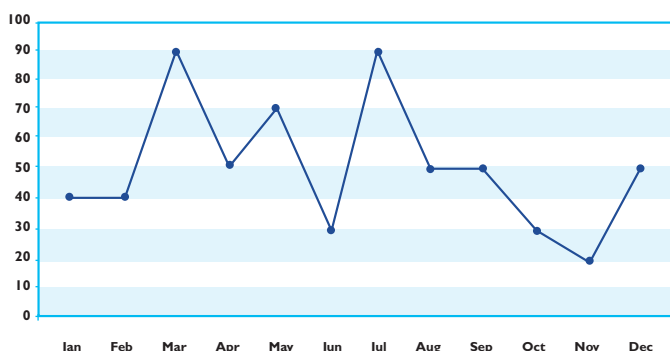


Figure 3: Distribution of Enforcement Orders, 2004

user group on information systems

The National EHO Information Systems User Group (NEISUG) was convened in late 2004. The aim of the group, which represents each of the ten former health boards, is to ensure national consistency in the recording of information regarding premises and inspections in EHO information systems, including both the Keogh and FLARE systems.

The group has met twice to date and has focused on the implementation of *Guidance Note No. 1: Inspection of a Food Business* (Revision 1) and *Code of Practice No. 1: Risk Categorisation of Food Businesses* (Revision 1 DRAFT).



Pictured are: Mr Derek Bauer, ERHA; Mr Seamus Mitchell, WHB; Ms Tara Woods, NEHB; Ms Sinead Flynn, SEHB (Chair); Ms Deirdre Lavin, MHB; Ms Rita Moloney, MWHB (Secretary) and Mr Aiden Jones, SHB. Absent from photograph: Mr Neil Rutherford, NWHB.

de-regulation of pack sizes

The European Union's involvement in metrology dates back to the 1970s, when common rules were adopted on units of measurement for pre-packaged products such as milk, coffee, sugar, drinks as well as for detergents, pet food, cleaning products, paints etc. Recently, legislation on measurement instruments has been modernised (Directive 2004/22/EC) and as part of the SLIM (Simpler Legislation for the Internal Market) exercise, the European Commission now aims to simplify the vast and complex legislation on pre-packaged products by creating one single Directive and thus eliminating the 25 national rules and two Directives currently in existence.

The Commission is proposing that pack sizes should be de-regulated and that sizes will be mandatory only where necessary. In four sectors, (wine, spirits, soluble coffee and white sugar), an EU impact assessment found that cost elements justify maintaining those sizes that are most sold to consumers. The proposal is to allow the exemption to last for 20 years (the average lifetime of packaging machinery), after which these sectors would also be subject to full competition.

The paper produced under SLIM suggested that, when reviewing the existing provisions on packaging, the opportunity should be taken to clarify definitions that give rise to problems of interpretation in the current Community rules. These definitions include:

- **Quantity:** A pre-packaged product is the combination of a product and the material in which it is packaged. In current Directives there is no definition of packaging material and this has given rise to a lack of clarity, e.g. whether the sweet wrappers are included in the weight mentioned on the packed product or not. The paper suggests that "packaging therefore is everything of the pre-package that is meant to be left over after use of the product, except for items naturally in the product" i.e. the quantity of product that is meant to be used or consumed.

- **Drained weight:** The SLIM paper proposes that the drained quantity is the solid part of the product that is meant to be used minus the liquid medium in which it is preserved. In the case where the liquid medium is a second product which can be consumed, e.g. 'fruits in juice' or 'cheese in olive oil', its quantity should also be mentioned separately as well on the pre-package, i.e. there will be two content declarations.

- **Frozen products:** The SLIM paper suggests that frozen products should follow the same principles as for drained quantity. The water used as the liquid medium should be excluded from the quantity indicated on the pre-package.

The paper also deals with provisions to guarantee the correct filling of packages, e.g. batches, manual filling, differently sized product filling as well as labelling requirements. The paper can be accessed at: http://europa.eu.int/comm/enterprise/prepack/documents/work_doc_metrolog_requirem_jan_2005.pdf

The Commission has launched a public consultation in the form of a brief questionnaire to solicit the views of both consumers and producers/retailers on its plans for simplifying current legislation and aligning it with the international standards formulated by the OIML (Organisation Internationale de Métrologie Légale). The consultation which takes the form of a simple questionnaire can be accessed on the internet at: <http://europa.eu.int/yourvoice/forms/dispatch?form=371>. The consultation will remain open until 15 March 2005, after which the results will be available on the Europa website.



The following Regulations have been introduced over the last few months in Ireland:

S.I. No. 577 of 2004
European Communities
(Pesticides Residues)
(Foodstuffs of Animal
Origin) (Amendment)
(No. 3) Regulations, 2004

S.I. No. 723 of 2004
National Beef Assurance
Scheme Act, 2000
(Approval) Order, 2004

S.I. No. 820 of 2004
European Communities
(Trade in the Production,
Processing, Distribution
and Introduction of
Products of Animal Origin

for Human Consumption)
Regulations, 2004

S.I. No. 874 of 2004
European Communities
(Fresh Meat)
(Amendment)
Regulations, 2004

S.I. No. 875 of 2004
European Communities
(Meat Products and Other
Products of Animal Origin)
(Amendment) Regulations,
2004

S.I. No. 876 of 2004
European Communities
(Minced Meat and

Meat Preparations)
(Amendment)
Regulations, 2004

S.I. No. 892 of 2004
European Communities
(Purity Criteria on Food
Additives other than
Colours and Sweeteners)
(Amendment) Regulations,
2004

S.I. No. 42 of 2004
Health Act, 2004

S.I. No. 885 of 2004
Health Act, 2004
(Establishment Day)
Order, 2004

S.I. No. 886 of 2004
Health Act, 2004
(Commencement)
Order, 2004

S.I. No. 887 of 2004
Health Act, 2004
(Commencement)
(No. 2) Order, 2004

fsai information centre

The Food Safety Information Centre is located at our offices on Lower Abbey St. and contains a wide range of information related to food safety. The Information Centre resources include: legislation, standards, official publications, annual reports, dictionaries/directories/maps, books, reports, audio-visual material, journals, scientific magazines etc. There are also a number of electronic resources available for members of the public - Web-Cat, Barbour Index-Food Safety Professional, Food Science and Technology Abstracts, Aquatic Science and Fisheries Abstracts, CAB Extracts, Eurolaw, Irish Statute Book and E-Journals. Other services include photocopying, public access PCs, printing and audio-visual facilities.

The Information Centre is open to staff of Government agencies, the food industry, researchers and the general public and is open from 9am - 5pm, Monday - Friday. We ask that you contact the

Information Centre in advance to arrange a time to visit. This will enable us to ensure appropriate assistance is provided and the information requested is available. A time can be arranged either by contacting us on 01 - 8171300 or by email on info@fsai.ie.

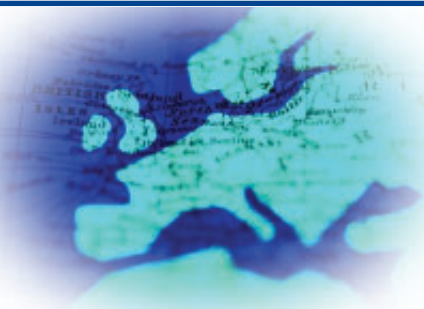


official controls - regulating the inspectors

By 2006, all food business operators in Ireland and across Europe will be subject to new hygiene regulations, known as the 'Hygiene Package'. As food businesses begin to plan for and get to grips with the coming changes, they may draw some consolation from the fact that the inspectors are in the same boat. Not only will the inspectors have to gain a thorough understanding of the new rules and how to apply them, but an equally comprehensive law will come into force in 2006 which will set down the requirements and expectations of how inspectors plan, organise and perform their work. Regulation 882/2004 on the official controls on food and feed will be to inspectors what the Hygiene Package is to food business operators.

The philosophy of the Food Hygiene Regulations is that food business operators bear the primary responsibility for food safety and should be able to demonstrate that they are in control of their operations. A similar philosophy now applies to what are commonly called competent authorities (CAs) and by implication their inspection officials. CAs at all levels will not only have to be in control, but demonstrate through verification that their control plans are effective and appropriate. Controls plans will be subject to internal and/or external audits together with any necessary corrective actions. In short, the PDCA (plan, do, check and act) cycle, which is at the centre of total quality management will become the prerequisite and the norm in all food and feed control agencies.

Controls can be delegated to private control bodies, which will be required to be accredited to standards such as EN45001. However, delegation cannot be used as a substitute for CAs overall responsibility.



Regulation 882/2004 recognises the importance of the HACCP principles including the use of 'Guides to Good Hygiene Practice' and promotes best practice for all food and feed business operations. It details specific requirements for both import and export of food and feed materials and details specific sampling criteria for CAs. Laboratory analysis is also addressed whereby official control laboratories will have to be accredited. Requirements for community and national reference laboratories are also detailed.

"The Regulation also addresses performance of national control systems."

In all but name, the new Regulation, in effect, hints at the development of a quality management system for CAs in order to ensure that official controls are carried out 'uniformly' and 'to a consistently high quality'. The Regulation also addresses performance of national control systems which will need to be assessed against the delivery of the requirements of a multi-annual national control plan (NCP). To this end performance indicators will need to be specified in assessing NCPs and audits of CAs and control bodies will now form an integral part of this assessment.

Reporting of the outcomes of the NCP in the form of an annual report, will have to be communicated to the European Commission on a yearly basis and must include:

- results of controls and audits
- type and number of non-compliances/infringements
- actions taken to ensure effective operation of the NCP, including enforcement activities and outcomes.

On the basis of the operation of the NCP in Member States, the European Commission, through its Food and Veterinary Office (FVO) will carry out on a regular basis, general and specific audits of all Member States. The purpose of the audits are to:

- verify the correct implementation of community law
- verify the implementation of the NCP
- verify the functioning and organisation of the CAs
- investigate emergency situations, emerging problems and any new developments.

The Commission will publish a report on these findings and where appropriate make recommendations to Member States on the compliance with EU legislation and the effectiveness of national control systems. The Commission will also verify compliance or equivalence of third country legislation and control systems with EU requirements.

The new Regulation significantly raises the bar on effective enforcement, monitoring and assessment of national feed and food controls and provides for a much more focused approach by the European Commission services to auditing of official controls.

open consultation

There is currently one open consultation on our website:

Guidance Note on Food Stalls

The Guidance Note on Food Stalls was prepared by a working group chaired by the Food Safety Authority of Ireland (FSAI). Representations were made by both health boards (now Health Service Executive), and the Irish Food Market Traders Association (IFMTA) in drafting the guide. This Guidance Note applies to food stalls and mobile food vehicles and similar temporary and mobile

food businesses. It intends to provide guidance on the standards and arrangements necessary in order to comply with the relevant food hygiene legislation. Guidance on labelling for stallholders is also offered.

Comments submitted to this consultation will be reviewed by the working group in preparing the final draft of the document.

The deadline for submission of comments is 9th March 2005. Further information is available on the FSAI website at: www.fsai.ie/consultations/index.asp

dolores departs the fsai



Dolores Moran, Director of Corporate Services, recently left the FSAI and returned to the Department of Health and Children. Dolores had responsibility for the human resources, finance and IT functions of the FSAI. She led a major change management programme within the organisation, which was designed to ensure that the FSAI is best placed to discharge its principal legislative function of ensuring that food consumed, distributed, marketed or produced in Ireland meets the highest standard of food safety and hygiene reasonably available, in a flexible, responsive and cost effective manner. We acknowledge Dolores' contribution to the Authority and wish her every success in her future career.

memorandum of understanding

Both the Food Safety Authority of Ireland (FSAI) and safefood, the Food Safety Promotion Board (FSPB) share a common goal of protecting consumers' health and consumers' interests. A Memorandum of Understanding (MOU) was signed recently by both parties which sets out a framework for co-operation between the two organisations. The agencies jointly affirm their commitment, in the interests of food safety and consumer protection, to develop effective working relations so as to ensure that the best possible service is delivered. The agreement is to maintain regular contact (both formal and informal) in order to discuss business of mutual interest as it is recognised that good communication is essential to effective working within and between both organisations.



*Pictured signing the MOU are:
Mr Martin Higgins, CEO, FSPB
and Dr John O'Brien, CEO, FSAI.*



mailing list

fsainews is a resource for all public health professionals, researchers, food scientists, food hygienists and quality control personnel working in food safety.

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Felicity McManus, Food Safety Authority of Ireland, Abbey Court, Lower Abbey Street, Dublin 1.

new member of fsai board



Ms Mary Falvey, Principal Environmental Health Officer (PEHO), Health Service Executive - Southern Area has recently been appointed as a Board member of the FSAI. She has over 30 years food safety experience, with particular expertise of relevance to the catering sector and an interest in the regulation of nursing homes and pre-schools. She has lectured in the Dublin Institute of Technology on the Environmental Health Officers Course and has served on the FSAI's Scientific Committee and its Additives, Chemical Contaminants and Residues Subcommittee. She is currently a member of the Cork Zoonoses Committee.

Within the former Southern Health Board, Ms. Falvey was instrumental in promoting food hygiene training within the catering sector and other local food industries in the Cork region. She recently served on a number of committees producing interdisciplinary protocols on the investigation of both sporadic and general outbreaks of foodborne illness, and protocols on the regulation of nursing homes and pre-schools.

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