



***Evaluating FSA Guidance on
Cross-Contamination of E. coli
O157 Research Report***

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1 Executive summary

1.1 Overview of key findings

- Awareness of the FSA's advice on *E. coli* cross-contamination was high with over nine in ten businesses aware of the advice and no Officers being screened out of the survey due to lack of awareness.
- The main sources of awareness for businesses was in-house or the Local Authority/District Council and for Officers it was the FSA.
- Awareness of the FSA documents was high amongst officers and businesses.
- The majority of both Officers and businesses consulted found the documents easy to understand – the full guidance was the least easy to understand.
- Over a half of businesses could not suggest any improvements to the guidance. Officers suggested that a number of sources or methods would help businesses better understand the guidance, with the main suggestions being more visuals or translation into other languages.
- Nine in ten Officers found the factsheet for caterers useful.
- Although Officers personally found the documents easy to understand, they did mention that practical examples and specific guidance for small businesses would help promote understanding among Officers in general.
- Two in five businesses had made changes to working practices following the FSA's advice.
- Where businesses had not made changes this was primarily due to the fact they were already meeting the guidelines.
- The majority of businesses, who had employees, did not have any difficulties with getting staff to put the guidance into practice.
- Officers found the FSA's guidance materials useful in tackling cross-contamination issues.
- Officers felt there were a number of aspects of the guidance that caused problems for businesses, in particular clean areas set aside, separate items of complex equipment and the use of British Standard disinfectants.
- Over a half of Officers had increased the length of their visits as a result of implementing the FSA guidance.

1.2 Background and objectives

1.2.1 Background

E. coli O157 Cross-Contamination Guidance was developed in response to an outbreak of *E. coli* O157 in South Wales in September 2005.

The final public inquiry report in 2009¹, undertaken by Professor Hugh Pennington which investigated the circumstances that led to the *E. coli* O157 outbreak and how it was handled, identified the cause as cross-contamination between raw and ready-to-eat foods, in particular a failure to ensure that critical procedures such as cleaning and the separation of raw and cooked meats were carried out effectively.

The first version of guidance was developed from findings from both public inquiries and independent scientific studies, but a formal evaluation of the guidance in 2012 identified concerns, and a new version of the guidance was produced in December 2014. This aimed to make the guidance clearer and easier to follow, and allowed a degree of flexibility for businesses to undertake a risk-based approach, while still maintaining public health protection.

1.2.2 Objectives

A post implementation evaluation of the revised guidance to ensure it has achieved its objectives, explore awareness and gather feedback from businesses and Local Authority Food Hygiene Enforcement Officers (referred to as Officers throughout the remainder of the report).

1.3 Method outline

1.3.1 Data collection

The following strands of research were undertaken:

- 10 minute Computer Aided Telephone Interview (CATI) with the person responsible for food safety in 501 food businesses across England, Wales and Northern Ireland;
- 10 minute CATI survey with 104 Officers across England, Wales and Northern Ireland;
- An online focus group which lasted 90 minutes with 8 Officers who agreed during the telephone survey to participate in / contribute to further research;
- 5 on site visits with food businesses who agreed during the telephone survey to participate in / contribute to further research.

1.3.2 Sampling

The sample frame for food businesses was drawn from the Food Hygiene Rating database held by the FSA, and the Officer contacts were also provided by the FSA.

¹ <http://gov.wales/docs/dhss/publications/150618ecoli-reporten.pdf>

1.4 Summary of findings

1.4.1 Awareness

Of the 501 food businesses interviewed, over nine in ten (91%) reported they were aware of the Food Standards Agency's advice on *E. coli* cross-contamination.

Food businesses that are categorised as Takeaway/sandwich shops were significantly less likely to be aware of the guidance than the average across all business types.

Only those Officers who were aware of the FSA's guidance on *E. coli* were screened in to the survey, but no Officers were screened out on this basis.

1.4.2 Source of awareness

The main sources of awareness for businesses were 'in-house training or information' (34%) and 'visits from a food safety officer' (20%).

Overall a quarter of respondents (24%) mentioned the FSA as the source either via the website or via written information. Overall a third (36%) mentioned the Local Authority/District Council (LA/DC) as a source either via a visit, a factsheet or leaflet, a letter, or a phone call, although it is unclear the extent to which this might in fact have been sourced originally from the FSA.

Officers said they most commonly provided the FSA factsheet for caterers (87%), while over a half of Officers had provided the full FSA guidance and the FSA guidance on re-commissioning vacuum packers (59% and 53% respectively). Close to a quarter (22%) of Officers had provided their own guidance or factsheet.

1.4.3 Document awareness

Over three in five businesses (63%) were aware of the FSA 4-page factsheet with a similar proportion (60%) saying they were aware of the full FSA guidance document.

Of the 65 food businesses included in the sample that use complex equipment two in five (42%) were aware of the FSA guidelines for re-commissioning vacuum-packers. Overall, while close to a quarter of respondents (24%) said they were not aware of any of the documents, this fell to 14% among businesses using complex equipment.

Among Officers, prompted awareness of the FSA's guidance documents on *E. coli* was almost universal, with all Officers stating they were aware of the full guidance (100%) and all but one officer stating they were aware of the 4-page factsheet for caterers (99%). While still high, awareness of the guidance on re-commissioning vacuum packers was lower at 81%.

The majority of Officers said the guidance documents were communicated to them by the FSA (85%), whether that was via FSA correspondence (69%), the FSA website (23%) or FSA funded training (5%). Around a third of Officers (35%) had the documents communicated to them internally via email with a further 14% stating it was via internal team meetings or briefing sessions.

1.4.4 Views on guidance

The majority of businesses found the materials easy to understand with four in five giving the factsheet a score of 4 or 5 out of 5 (81%) and a similar proportion (86%) of those using complex equipment giving the guidelines for re-commissioning vacuum-packers a score of 4 out of 5. The document that was perceived as the least easy to understand was the full guidance, however close to three quarters of respondents gave this a score of 4 or 5 out of 5 (73%).

The majority of Officers found the materials easy to understand with nine in ten giving the factsheet and the guidelines for re-commissioning vacuum-packers a score of 4 or 5 out of 5 (91% and 89% respectively). The document that was perceived as the least easy to understand was the full guidance. However this was still rated highly with over four fifths of Officers giving this a score of 4 or 5 out of 5 (83%).

Over half of businesses (53%) did not suggest any improvements to the guidance, and a further one in ten (13%) did not know how it could be improved. For those who could, the main suggestion was to simplify the language (10%). This was followed by 7% of respondents suggesting that the FSA could communicate more/provide more updates.

Officers mentioned a number of resources or methods the FSA could provide to help businesses better understand the guidance, with around a quarter suggesting more visuals (25%) or translation into other languages (22%). Close to three in ten Officers (29%) said that no other resources were needed.

Although Officers said they personally found the documents easy to understand, around four fifths of Officers said more practical examples (82%), including specific guidance for small businesses (79%) and including guidance for specific sectors (78%) would promote better understanding among Officers.

1.4.5 Guidance implementation

Two in five businesses (40%) said they had made changes to working practices as a result of the FSA's guidance on cross contamination.

The top three changes made by businesses as a result of FSA guidance were 'new hand washing procedures' (87%) followed by 'separate chopping boards and utensils for raw and ready to eat foods' (85%) and 'clean areas set aside for handling ready to eat foods' (84%).

Of those businesses that had not made any changes to working practices following the FSA's advice (266 in total), over nine in ten (91%) said this was due to the fact they felt they were already meeting the guidelines.

Over two in five (41%) businesses said the reason they had not made a specific change in practice was because they felt they were already meeting the FSA guidelines, and a further three in ten (30%) said that they had made all the changes that were applicable to their business.

Over a half of Officers (54%) said they had increased the length of their inspection visits as a result of the FSA guidance. Close to a half also mentioned they had changed the level of detailed information provided to food businesses (46%) and a similar proportion (44%) mentioned that they made sure businesses were aware of cross-contamination guidance.

At least three quarters of Officers said the guidance materials were useful for tackling all the different cross-contamination issues outlined in the questionnaire, and particularly so for tackling the separation of raw and ready to eat foods, with close to nine in ten (88%) providing a score of 4 or 5 out of 5.

Of those businesses who had made changes to working practices (40% of businesses aware of the advice), the majority (95%) said they had experienced no difficulties when making changes to working practices. The majority of businesses (95%) also said there were no areas that were difficult to get staff to put into practice.

Officers said they were confident in applying the FSA guidelines when visiting food businesses with the majority (95%) giving a score of 4 or 5 out of 5.

Four in five Officers (80%) said that either all or the majority of the businesses they had visited had implemented the controls which are applicable to their business, as detailed in the FSA guidance on *E. coli*.

Two thirds of Officers (66%) mentioned that they wrote letters advising businesses on compliance where businesses had not implemented the guidance. Over a third of Officers (37%) said they re-visited businesses where they were underperforming and close to a quarter (24%) that they wrote an inspection report which identified the areas for improvement.

The main area of the guidance that Officers felt caused problems for businesses were connected with physical separation, with over a half of Officers (57%) mentioning this.

Specifically, Officers felt it was the clean areas set aside for handling ready to eat foods and separate items of complex equipment for raw and ready to eat foods that caused the most problems for businesses with around a quarter mentioning these (26% and 23% respectively). Officers also felt that the use of British Standard disinfectants was a problem for businesses with close to a fifth (18%) mentioning this.

Officers felt it was more likely to be ethnic businesses that experienced problems implementing the FSA's guidance, whether restaurants/cafes/takeaways (27%) or caterers (23%). A third of Officers (33%) also mentioned smaller food businesses and just over a fifth (22%) mentioned takeaways/sandwich shops. This is consistent with those businesses that were most likely to have a lower food hygiene rating.

1.4.6 Those unaware of FSA's advice

Only 5 businesses using complex equipment indicated that they were not aware of the FSA's advice. All of these respondents reported not using the same item of complex equipment for both raw and ready to eat foods.

Of the 44 respondents who were not aware of the FSA's advice on *E. coli* over a third (37% or 16 respondents) said they used the same individual item to prepare or store both raw and ready to eat foods. The items that respondents were prompted with included chopping boards, knives, sinks and fridges.

1.5 Conclusions and recommendations

1.5.1 Conclusions

In order to protect the public from *E. coli* cross-contamination it is important that food businesses are aware of the potential risks inherent in their practices and have the necessary support and information from the FSA and Officers on how to avoid those risks. Whilst the findings show an increase in businesses awareness of the advice such that 91% are now aware (cf. 65% in 2012) and a good understanding of, and adherence to the guidance, it is important for the support and channels of information to continue to keep this awareness and compliance at high levels.

The research highlighted a number of potential opportunities to enhance the effectiveness and awareness of the guidance which have been outlined below. Clearly there would need to be a detailed cost/benefit analysis to understand the feasibility of each.

1.5.2 Maximising awareness of the guidance

Communication of the guidance to businesses needs to continue to keep awareness high. After in-house training, face-to-face contact is the second most commonly mentioned method of finding out about *E. coli* advice, highlighting the importance of this channel. This can also give businesses the opportunity to ask questions and seek guidance if they are unsure about something.

Given that businesses refer to Safer Food Better Business (SFBB) and other template food safety management systems when discussing issues relating to cross-contamination, consideration should be given to ensuring consistency as far as possible with regard to terminology between the *E. coli* guidance and SFBB.

Consideration should be given to a review of related materials issued by other bodies such as the National Health Service (NHS), e.g. in relation to hand washing, to maximise consistency of message delivery within FSA guidance.

The sharing of knowledge amongst Officers needs to continue as this is a vital part of training and can help ensure consistency of delivery of the guidance. This could be done via forums and webinars rather than face-to-face so more people can attend and reduce the cost. The effectiveness of training also needs to be considered as sessions that allow for discussion and sharing of experiences are highly valued by Officers.

Welsh Officers in the focus group who received FSA communications via Regulatory Information and Management System (RIAMS) spoke highly of it and found it useful. This could potentially be rolled out to Officers across England and Northern Ireland.

1.5.3 Enhancing the guidance documentation

Although this was not directly covered with businesses in the telephone survey, it became apparent during the site visits that there was some confusion with what was meant by ready to eat foods. Some businesses indicated that they did not handle ready to eat foods although they used such things as rolls, bread, tinned goods, etc. Therefore, some more direction around what constitutes ready to eat foods would help businesses.

It should be noted that actual changes to the principles of the guidance should be limited as this can cause confusion among businesses.

It was noted by Officers in the focus group that it is not a legal requirement to enforce the guidance but rather to examine and determine case by case whether the arrangement and methods implemented do the job. If there is something that businesses must do this needs to be clearer for the Officers to enforce.

The Local Authority food hygiene focus group, which is organised by the Chartered Institute of Environmental Health (CIEH) and comprises FSA regional representatives from Wales, Northern Ireland and England as well as other public health bodies, was seen as vital by Officers. All Officers in the online focus group had used this to raise issues or concerns with the guidance. This should therefore continue as a vital development tool.

There is a need in general for the guidance to be simplified for businesses so it is easier to understand and implement. Pictures, videos or other visuals would help this. Having it translated in to alternative languages would also help for those whose first language is not English. There could be links on the FSA website to various translated versions to save printing costs.

Smaller businesses whose first language is not English should be targeted and there needs to be an element of showing businesses what to do rather than just giving them guidance and expecting them to follow it. This is where videos and other visuals would work.

Officers would find more practical examples in the guidance helpful. Specific guidance for a particular sector or for small businesses, as is the case for SFBB packs, would also be helpful.

Consideration could be given to producing one page posters that can be displayed in kitchens, etc. Again, these could be available on the FSA's website to download, which would be cost effective. Similarly, a simple list of do's and don'ts that are relevant for most, if not all, businesses and is easy to follow would help.

There is confusion amongst both businesses and Officers around cleaning chemicals that can and cannot be used. It would be helpful if a list of chemicals that definitely cannot be used was produced, although it is appreciated that keeping this up-to-date may be challenging. As an alternative, it might be possible to provide details around what the chemical should do or contain, such as, “needs to say anti-bacterial”, rather than that it should be British Standard European Norm (BSEN) standard and be able to kill *E. coli*. More details around contact times for chemicals is also needed.

2 Introduction

2.1 Background

The *E. coli* O157 Cross-Contamination Guidance was developed in response to the Public Inquiry into the outbreak of *E. coli* O157 in South Wales in September 2005. The outbreak caused 157 cases of illness, with 31 people admitted to hospital and the death of a five-year old boy. The Public Inquiry, chaired by Professor Hugh Pennington, was carried out over a three year period and represented a detailed investigation into the circumstances surrounding the outbreak. The final report, published in 2009, identified that the root cause of the outbreak was cooked meats that had become contaminated with *E. coli* O157 and sold to different establishments including local schools. The report also identified a number of failures in the systems of control that contributed to the outbreak. Specific reference was made to a failure to ensure that critical procedures such as cleaning and the separation of raw and cooked meats were carried out effectively. The findings mirrored that of an inquiry into the *E. coli* outbreak in Scotland, the largest in the UK (in which 21 people died), where cross-contamination between raw and ready-to-eat foods had also been identified as the source of the outbreak.

The first version of the guidance was developed based on the findings of both public inquiries and on a number of independent scientific studies that highlighted the difficulty of relying on procedural controls to address the risks associated with cross-contamination.

For this reason the principle of separation when handling raw and ready-to-eat foods was considered to be the safest control measure. In particular, that dual use of complex equipment, such as vacuum packing machines, slicers and mincers etc., should never be considered safe.

The guidance was produced on the following principles that were subject to a formal public consultation in 2010:

- Separation of equipment and where possible staff involved in handling both raw and ready-to-eat food (RTE);
- Cleaning and disinfection;
- Personal hygiene and handling practices;
- Management of controls (documenting procedures, record keeping, training and supervision).

In February 2011 the FSA published the guidance and an additional fact sheet summarising its content.

Formal evaluation of the guidance was conducted in 2012. Concerns about the guidance were raised during the review, in particular the use of separate complex equipment as a control measure. In response the FSA commissioned scientific research to independently test the alternative controls to cross-contamination proposed by stakeholders, and to ensure that any unnecessary burdens on businesses were removed while strengthening the effectiveness of public health protection.

Following independent FSA research², a new version of the guidance was produced in December 2014 which aimed to make it clearer and easier to follow, and allowed for a degree of flexibility for businesses to undertake a risk-based approach, while still maintaining public health protection.

2.2 Research Objectives

The broad aim of this research was to undertake a post implementation evaluation of the revised guidance to ensure it had achieved its objectives, exploring awareness of the guidance and gathering feedback from both food businesses and local authorities in relation to their understanding and implementation of the guidance. Of particular interest were factors that could discourage or prevent businesses from applying the principles of the guidance.

More specifically the research sought to gather evidence from businesses and Officers in relation to a number of detailed and complex areas:

- The extent of awareness of the guidance;
- Changes in awareness of the risks, by establishing how and when the respondent first became aware of the guidance stated and recorded evidence of practices being changed as a result of the guidance;
- Views and proven knowledge on how well the revised guidance is understood, in particular compared with the old guidance;
- Challenges associated with its implementation from the perspective of the respondent;
- The benefits and costs incurred by food businesses following changes to practice or equipment;
- The benefits and costs incurred by local authorities following the introduction of the revised guidance.

Due to constraints on questionnaire length, and issues of comprehension, questions on the following themes were removed from the final questionnaire:

- Seeking advice on new FSA *E. coli* guidelines
- Cleaning products meeting BSEN standards
- Benefits of changes made following FSA guidance
- Changes made to products buy, sell or produce as result of FSA guidelines, and
- Impact of changes on business and financial costs of making changes to comply with FSA guidelines.

Although these points were explored to a degree in the Officer focus group and food business site visits, the evidence relating to these aspects is necessarily weaker.

² <http://www.food.gov.uk/sites/default/files/multimedia/pdfs/science-research/iff-westminster-university-research.pdf>

2.3 Methodology

In order to address the research objectives outlined above firstly the following strands of research were undertaken:

- 10 minute Computer Aided Telephone Interview (CATI) with the person responsible for food safety at 501 food businesses across England, Wales and Northern Ireland;
- 10 minute CATI survey with 104 Officers across England, Wales and Northern Ireland.

A telephone methodology was chosen to best meet the objectives within the agreed budget and timescales. Quantitative data collection by phone (CATI) amongst food businesses and Officers ensured the collection of a robust sample size across a wide geographical area in a short period of time.

To provide more context to the CATI findings, this was supplemented by the following strands:

- 5 on site visits with food businesses who agreed during the telephone survey to participate in / contribute to further research. This encompassed a semi-structured 45 minute depth interview to explore the challenges faced in implementing the guidance in more depth, plus observations of the premises and food preparation practices (where practicable);
- An online focus group which lasted 90 minutes with 8 Officers who agreed during the telephone survey to participate in / contribute to further research. This element allowed the sharing of views about the V3 guidance, its implantation and ideas for its improvement.

2.4 Sampling

2.4.1 Food businesses

The sample frame for the food business survey was drawn from the Food Hygiene Rating database held by the FSA and comprised the business types agreed with the FSA as relevant for this research:

- Childcare/caring premises (excluding hospitals);
- Hotel/bed & breakfast/guest houses;
- Mobile caterers;
- Other catering premises;
- Restaurants/cafes/canteens;
- Takeaway/sandwich shops.

The sample was drawn to ensure it was proportionally representative by nation and stratified within nation by business type and rating. In order that the findings could be analysed by food hygiene rating, the lower rating businesses with a score of 0 to 2, which represent a very small proportion of the businesses in the sample frame (0.37%), were over-sampled relative to their prevalence in the population, and represented 2% of the final sample prior to weighting of the data.

Telephone numbers are not included within the food hygiene rating database so once the sample had been drawn a tele-match exercise was undertaken to source these. Of the c. 31,000 contacts originally sampled, 63% were successfully tele-matched (equating to c. 20,000 contacts), a figure which was reduced as a result of the difficulty of tele-matching mobile caterer (11% of contacts of this type were successfully matched).

The table below shows the percentage of valid contacts that were available within each business type, against the achieved profile of interviews, which demonstrates that the sample was broadly representative on this basis.

Figure 1: Percentage valid contacts compared with achieved sample profile

| Business Type | % valid database contacts | % achieved interviews |
|-----------------------------------|---------------------------|-----------------------|
| Childcare/Caring Premises | 13% | 16% |
| Hotel/bed & breakfast/guest house | 6% | 7% |
| Mobile caterer | 6% | 2% |
| Other catering premises | 17% | 12% |
| Restaurant/Cafe/Canteen | 39% | 44% |
| Takeaway/sandwich shop | 18% | 19% |
| TOTAL | 100% | 100% |

Contact names were not included within the database so the survey was conducted with the person responsible for food safety at each site. Analysis of this information, which was captured during the survey, shows that close to a half of those interviewed were a director or a manager (49%), around a fifth were a chef (21%) and the same proportion were the owner (21%). The remainder were either something else or refused to provide this information.

2.4.2 Officers

The Officer contacts were provided by the FSA for local authorities (LA) across England, Wales and district councils (DC) across Northern Ireland. Although multiple contacts were provided for each LA/DC we sought to speak to only one contact from each, ensuring this was a person who regularly carried out inspections of food businesses, whether this was an Authorised Officer or a Lead Food Officer. Once the sample had been cleaned there were 312 contacts available. Achieved interviews were monitored by region to ensure the final sample was broadly representative of the contacts provided.

Figure 2: Percentage valid contacts compared with achieved sample profile

| Region | % valid database contacts | % achieved interviews |
|--------------------------|---------------------------|-----------------------|
| South East | 21% | 25% |
| East of England | 16% | 15% |
| North West | 14% | 14% |
| East Midlands | 13% | 11% |
| London | 10% | 11% |
| Wales | 7% | 10% |
| Yorkshire and The Humber | 8% | 5% |
| North East | 4% | 4% |
| Northern Ireland | 4% | 3% |
| South West | 4% | 3% |
| TOTAL | 100% | 100% |

2.5 Fieldwork

2.5.1 Food businesses

The food business telephone interviews were undertaken during January and February 2017, following a pilot stage to review the survey length as well as the clarity of the questions. A number of questions that were not central to answering the research objectives were removed in order to reduce the length, and these related to:

- Seeking advice on new FSA *E. coli* guidelines and if so, from who;
- Cleaning products meeting BSEN standards;
- Benefits of changes made following FSA guidance;
- Changes made to products buy, sell or produce as result of FSA guidelines and if so, what;
- Impact of changes on business;
- Financial costs of making changes to comply with FSA guidelines.

Amendments were also made to a number of questions to ensure they were clearly understood.

The final questionnaire can be found in Appendix 3.

In order to be eligible for the research food businesses were screened to ensure that they handled both raw foods (that can be a source of *E. coli* O157) **and** ready-to-eat foods.

Businesses were also screened on their awareness of the FSA's advice on *E. coli* cross contamination. Those who were unaware of the advice followed a shorter version of the questionnaire which ascertained equipment used at the site, as well as dual use of equipment at the site, measures in place to stop the transfer of bacteria and business profile questions.

2.5.2 Officers

The Officer telephone interviews were undertaken during February 2017, again following a pilot stage to review the survey length and the clarity of the questions. A number of amendments were made to ensure all questions were clearly understood.

The final questionnaire can be found in Appendix 3.

Officers were screened into the survey on the basis of being aware of the FSA's guidance on *E. coli*, although it should be noted that no Officers were screened out on this basis.

2.5.3 Qualitative elements

During the telephone interviews both businesses and Officers were asked if they would be willing to take part in future research. Those who agreed were used to recruit the Officer online focus group and the business case study site visits.

The Officer online focus group took place in March 2017 and consisted of 8 Officers from a mix of regions. An additional in-depth interview was conducted with one Officer who was unable to attend the online group. The topic guide for the group discussion was designed by BMG Research in conjunction with the FSA and broadly covered the areas in the telephone survey to provide more context to the quantitative findings as well as allow the sharing of views on the guidance, its implantation and ideas for its improvement.

The site visits were undertaken during March and April 2017 and covered a range of food hygiene ratings as well as businesses who had and had not made changes to their working practices following the FSA's advice on *E. coli*. The site visits consisted of a 45 minute qualitative interview and an optional 15 minute observation of the businesses food preparation area. The topic guide for the interview was designed by BMG Research in conjunction with the FSA and broadly covered the same areas as the telephone survey in order to provide context to the findings and provide a more anecdotal picture of how individual businesses use the guidance and explore the challenges faced in implementing the guidance. The individual case studies for these visits can be found in Appendix 5.

The final topic guides can be found in Appendix 4.

2.6 Analysis

2.6.1 Comparison to previous results

Throughout this report comparisons have been made to the previous research undertaken in 2012. These comparisons should be viewed with caution and are provided as a directional guide only for a number of reasons:

- Unlike the 2017 research, the 2012 research included Scotland;
- The 2012 survey included different business types (e.g. butchers);
- A larger number of interviews were undertaken in 2012;
- The weighting strategies used in 2012 research are not available;
- The survey screening and routing differ;
- There are differences in the wording of the questions.

2.6.2 Weighting

Given that the lower food hygiene rating businesses were over-sampled to allow for analysis among this group, the food business data have been weighted by food hygiene rating in order to ensure that they are representative of the business audiences under investigation on this basis. While weighted percentages are referred to throughout the report, sample sizes quoted are actual rather than weighted to provide an indication of the robustness of the results.

The table below shows the unweighted and weighted profile of the achieved sample by food hygiene rating.

Figure 3: Weighting of FBO data by food hygiene rating

| Food hygiene rating | Unweighted sample profile | Weighted sample profile |
|---------------------|---------------------------|-------------------------|
| 0 | 2% | 0.4% |
| 1 | 6% | 3% |
| 2 | 6% | 3% |
| 3 | 15% | 10% |
| 4 | 19 % | 19% |
| 5 | 52% | 65% |

2.6.3 General notes

Due to rounding, when summed some percentages may be $\pm 1\%$ different from summing individual proportions.

Statistically significant differences at the 95% confidence interval have been highlighted in charts with coloured arrows/ text; ↑ green indicating significantly higher difference, ↓ red indicating significantly lower difference. Where there are significant differences in sub groups this has been highlighted in the text.

2.6.4 Qualitative analysis

The transcript from the Officer focus group was analysed alongside the findings from the Officer CATI survey and findings from the group used throughout this report to enhance the findings from the CATI survey. The anonymous transcript from the focus group has also been provided to the FSA.

The findings from each of the site visits were analysed separately, as agreed with the FSA, and an individual case study developed for each visit. This was so that each business could be treated individually and the findings could be as objective as possible given the small sample size.

3 Main Findings

3.1 Food businesses – food hygiene ratings

As noted above, the final food business sample has been weighted to ensure it is representative in terms of food hygiene ratings.

Considering how this varied by sub-group, the following exceptions were evident:

- Takeaways and sandwich shops were significantly less likely than the average to have a rating of 5 (43% compared to 65% total sample), and significantly more likely to have a rating of 3 to 4 (45% compared to 29%);
- Businesses in the South East and London were significantly less likely than the average to have a rating of 5 (52% compared to 65% total sample), and significantly more likely to have a rating of 4 (28% compared to 19%);
- Businesses with less than 5 employees were significantly less likely than the average to have a rating of 5 (47% compared to 65% total sample), and significantly more likely to have a rating of 3 to 4 (44% compared to 29%);
- Those who did not have English as a first language were significantly less likely than the average to have a rating of 5 (46% compared to 65% total sample), and significantly more likely to have a rating of 0 to 1 (10% compared to 3%).

These findings are clearly related given that those who did not have English as a first language were more likely than average to have less than 10 employees (80% compared to 50% of total sample), more likely to be running sandwich shops and takeaways (40% compared to 16%) and more likely to be operating in London/South East (38% compared to 27%).

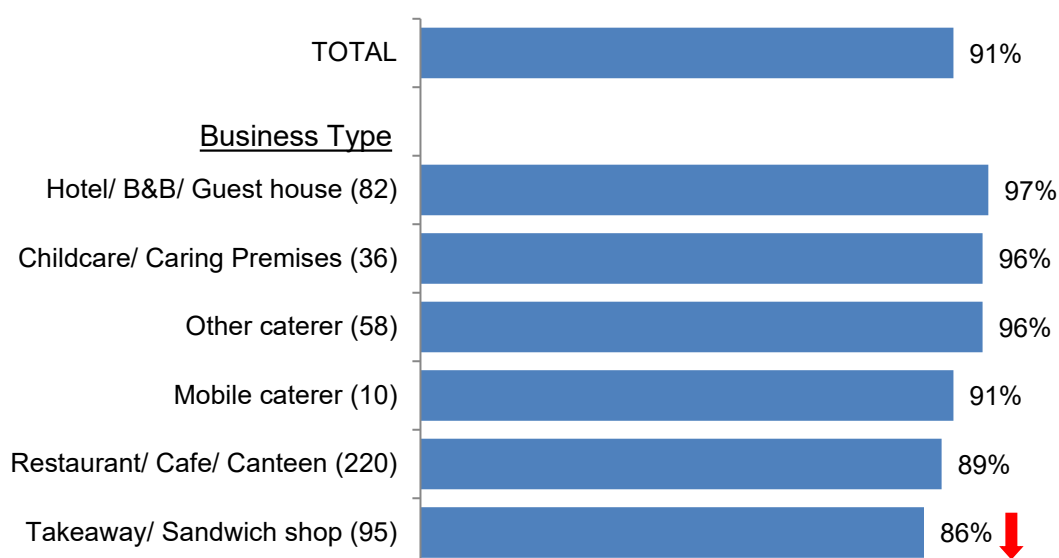
3.2 Awareness of the FSA's guidance on *E. coli* cross-contamination

3.2.1 Food businesses

Of the 501 food businesses interviewed, over nine in ten (91%) were aware of the Food Standards Agency's advice on *E. coli* cross-contamination.

In the 2012 research around two thirds (65%) said they were aware of the new guidance relating to *E. coli*.

Food businesses that are categorised as Takeaway/sandwich shops, who as noted above were significantly less likely than the average to have a food hygiene rating of 5 (43% compared to 65% total sample), were also significantly less likely to be aware of the guidance than the average across all business types.

Figure 4: Awareness of the FSA's advice on *E. coli* by food business type

Base: All food businesses (501)

3.2.2 Officers

Only those Officers who were aware of the FSA's guidance on *E. coli* were screened in to the survey, however, it is worth noting that no Officers were screened out of the survey due to lack of awareness.

In the online focus group with Officers there was a general consensus across the group that there were no issues in awareness amongst Officers and that it could not be improved. Despite this, it was mentioned that there may still be some inconsistency with regards to its application.

Officers felt that improving awareness of the guidance amongst food businesses was best achieved via their inspections, with some also mentioning that they had emailed all relevant businesses when the guidance first came out. There was also a feeling that awareness amongst food businesses was improving and that all should be aware of it by now.

"I think that most FBOs should be aware of it by now. It should be discussed at inspections where it is relevant."

3.3 Source of awareness of the FSA’s guidance on *E. coli*

3.3.1 Food businesses

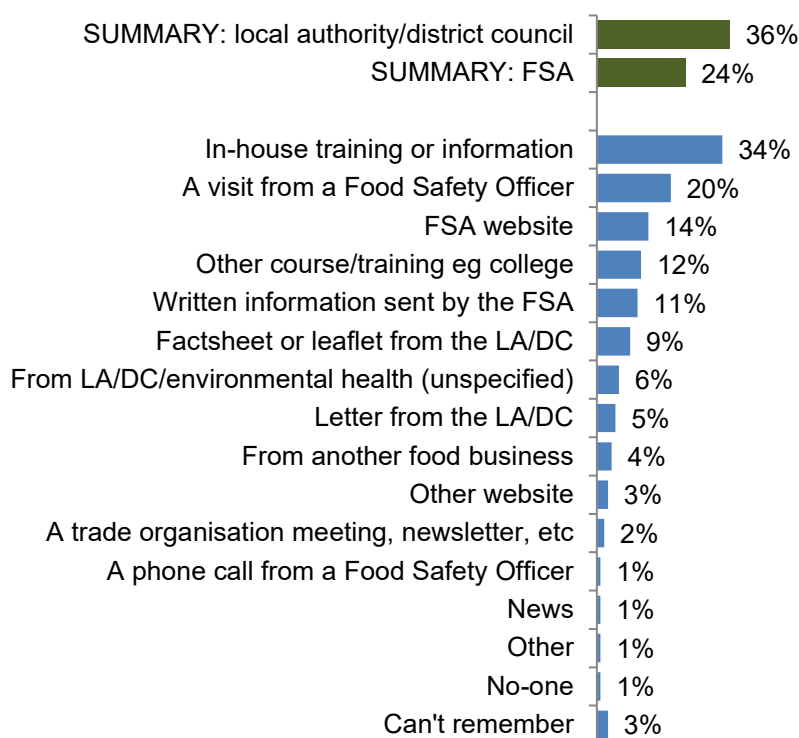
Food businesses who were aware of the advice on *E. coli* were asked unprompted from whom they first found out about the FSA’s advice on *E. coli*.

The main source of awareness was ‘in-house training or information’ with over a third (34%) mentioning this, followed by a fifth (20%) citing ‘a visit from a food safety officer’ as the source.

Considering the FSA sources on a combined basis, a quarter of respondents (24%) mentioned the FSA as the source either via the website (14%) or via written information sent by the FSA (11%). Considering the LA/DC sources on a combined basis, over a third (36%) mentioned these as a source either via a visit (20%), a factsheet or leaflet (9%), a letter (5%), or a phone call (1%).

It is worth noting that there is likely to be a degree of confusion with regard to the source of awareness, as businesses are likely to receive information originating from the FSA via their LA/DC. It is also possible that in-house training or information may also have originated from the FSA or LA/DC.

Figure 5: Source of advice on *E. coli* – unprompted (food businesses aware of FSA’s advice)



Base: Food businesses aware of FSA’s advice (457)

In terms of any significant differences in sources of awareness by sub groups, the following were evident:

- Those in food businesses that are categorised as childcare/caring premises were less likely to cite the source as another course/training, such as college, than the total across all business types (4% cf. 12% total);
- Those with 25 or more employees were more likely to cite the source as in-house training or information than those with less employees (48% cf. 26% less than 5 employees and 31% between 5 and 24 employees);
- Those whose first language is English were more likely to cite the FSA website as the source (16% cf. 4% whose first language was not English) and consequently more likely to cite the FSA in general (27% cf. 11%).

Those who were specifically aware of the FSA documents, whether that be the full guidance, factsheet or document on re-commissioning vacuum packers, were more likely to cite the LA/DC as the source in some form (39% cf. 26% not aware of the documents) as were those who had made changes as a result of the FSA guidance (41% cf. 32% who had not made any changes).

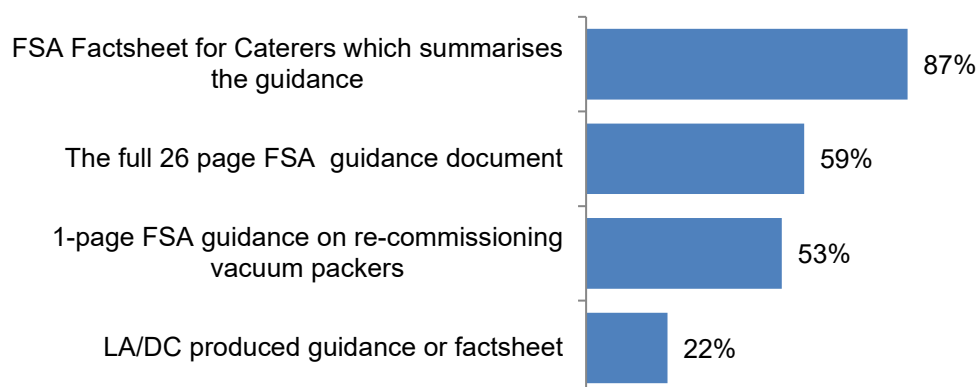
3.3.2 Officers

Officers said they had provided a number of different materials to food businesses to inform them about the updated guidance, with the FSA factsheet for caterers being the document most commonly provided (87%). Over a half of Officers had provided the full FSA guidance and the FSA guidance on re-commissioning vacuum packers to food business (59% and 53% respectively). Close to a quarter (22%) of Officers had provided their own guidance or factsheet as can be seen in the figure below.

Although this was a prompted question a number of other materials were mentioned unprompted which included:

- Advice during visit or post visit (6%);
- Letter with information (3%);
- Visual material – DVD, social media (3%);
- Advice via seminars (3%);
- Other materials (4%).

Figure 6: Documents provided to food business – prompted (Officers)



Base: All Officers (104)

Comparison with the 2012 results suggests that dissemination of the documents has increased: in 2012 72% of Officers said they provided the factsheet and 29% the full guidance (compared to 87% and 59% respectively in the latest research). The proportion reporting that they produced their own guidance or factsheet has remained consistent (22% compared to 23% in 2012).

Officers participating in the online focus group noted that the number of documents and the variety of information sources available can generate confusion for FBOs. This was connected with the number of documents being bewildering for businesses rather than inconsistencies in the documents with some noting that as well as the FSA guidance documents there is also the SFBB documents and that some LA's produce their own guidance. The fact that there are also a variety of documents for different pathogens can also generate confusion for FBOs.

3.4 Awareness of FSA guidance documents

3.4.1 Food businesses

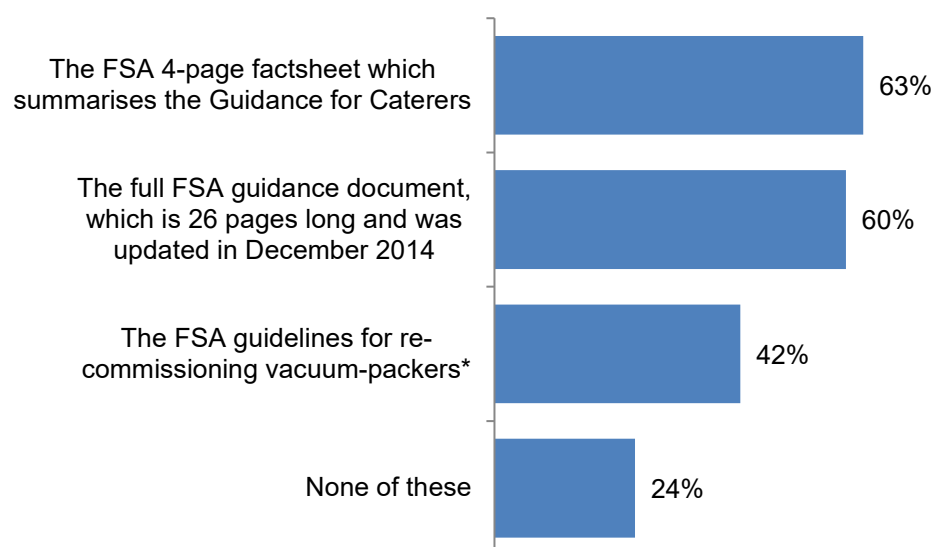
Food businesses that were aware of the FSA's advice on *E. coli* were asked which documents they were aware of that the FSA uses to provide information to businesses and were prompted with the following three documents:

- The full FSA guidance document which is 26 pages long and was updated in December 2014;
- The FSA 4-page factsheet which summarised the Guidance for Caterers;
- The FSA guidelines for re-commissioning vacuum-packers.

Over three in five respondents (63%) were aware of the FSA 4-page factsheet with a similar proportion (60%) saying they were aware of the full FSA guidance document. In the 2012 research 44% were aware of the factsheet and 41% were aware of the full guidance.

Of the 65 food businesses included in the sample that use complex equipment two in five (42%) were aware of the FSA guidelines for re-commissioning vacuum-packers.

Overall, while close to a quarter of respondents (24%) said they were not aware of any of the documents, this fell to 14% among businesses using complex equipment.

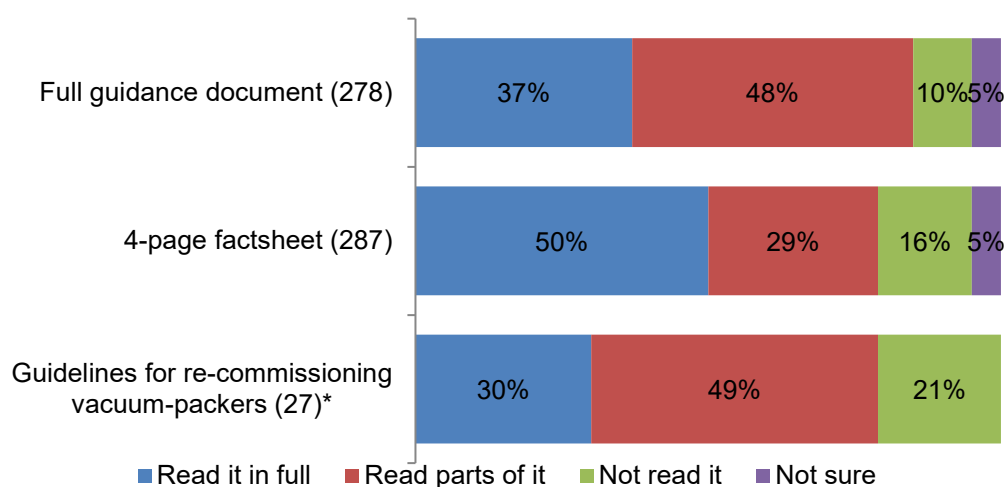
Figure 7: FSA documents aware of (food businesses aware of FSA's advice)

Base: Food businesses aware of FSA's advice (457) * Food businesses using complex equipment (65)

For each of the documents respondents were aware of, they were then asked whether they had read the document either in full or just in part.

Over four in five respondents (85%) had read the guidance document either in full or in part and a similar proportion (79%) had read the factsheet in full or in part. Among those using complex equipment, a similar proportion had read all or part of the guidelines for re-commissioning vacuum-packers.

In the 2012 research 79% had read the guidance either in full or in part and a slightly higher proportion had read the factsheet either in full or in part (86%). For the guidance it appears more respondents have read it in full than was apparent in the 2012 research (37% cf. 27% in the 2012 research).

Figure 8: Extent to which FSA documents read (food businesses aware of documents)

Base: Food businesses aware of each document () * Businesses who use complex equipment

3.4.2 Officers

Prompted awareness of the FSA’s guidance documents on *E. coli* was almost universal, with all Officers stating they were aware of the full guidance (100%) and all but one officer stating they were aware of the 4-page factsheet for caterers (99%). While still high, awareness of the guidance on re-commissioning vacuum packers was lower at 81%.

These high levels of awareness were mirrored during the online focus group, with all respondents spontaneously mentioning the three documents, and a couple of respondents also mentioning the sections around cross contamination in Safer Food, Better Business (SFBB).

When asked unprompted how the FSA materials were communicated to them the majority of Officers said via the FSA (85%), whether that was via FSA correspondence (69%), the FSA website (23%) or FSA funded training (5%). Around a third of Officers (35%) had the documents communicated to them internally via email with a further 14% stating it was via internal team meetings or briefing sessions.

Officers who were not part of a Primary Authority were more likely than those who were to state the FSA website as the source of the documents (29% cf. 10%).

Figure 9: How FSA documents communicated – unprompted (Officers)



Base: All Officers (104)

During the online focus group all Officers mentioned finding out about the documents through the FSA, whether that be via the website, e-mail or training events, with one Officer specifically mentioning that a direct route from the FSA to LAs was essential. There was also a sense of sharing knowledge about these documents through local or regional food groups whether face-to-face or via a forum. This information would then be shared with the rest of their team either via email, team meetings or training. The Officers were generally content with how the documents and information were currently provided to them with some respondents specifically mentioning new enhancements in communication, such as the RIAMS platform and webinars/podcasts.

“I am happy with the current method although other agencies are now using webinars/podcasts which I find useful too.”

“I am happy to receive emails from the FSA on important topics and changes as they occur. The information available on the FSA website is easy, relevant and valued. Also we are now getting to use to the new RIAMS platform – the FSA Wales sponsored repository for information and email information.”

“I mainly found out about the documents through FSA training events, emails and sharing local knowledge through forums such as Regional and All-Wales groups. The documents are also easily found on FSA website through a link on the front of home page.”

There was also a feeling that although correspondence such as emails from the FSA work well, in addition to this there is also a need to discuss the information in wider circles to ensure consistency.

In addition to internal discussions, training courses/events were perceived as important to inform team members' knowledge, ensure consistency and provide the opportunity to raise queries around points that are unclear. Concerns were raised regarding the loss of FSA funding for training events in England. The FSA website was also perceived positively as participants were able to find relevant information concerning the guidance easily.

“We are a relatively small team so have the opportunity to discuss any issues as they arise on a daily basis. We also hold more formal discussions and consistency exercises within team meetings. This is a very useful approach as it gets individual's direct input and opinions.”

“Training events are very important and we are gravely concerned about the loss of FSA funding for training events in England as these are essential to enable wider discussions.”

Officers were also asked if they recalled any **new** advice in the most recent FSA guidance on *E. coli*. Perhaps unsurprisingly, given the length of the time between the revisions to the guidance in December 2014 and this survey, over half of Officers (55%) did not recall any **new** advice.

Around a fifth (21%) recalled advice on 'no dual use of complex equipment unless they can be dismantled and fully disinfected between uses' and a further 16% recalled advice on 'equipment such as temperature probes, weighing scales and mixers can be dual use if there is a safe cleaning and disinfection procedure between uses'.

Figure 10: Recall of new advice in guidance (Officers)

| | % |
|--|-----|
| Nothing | 55% |
| No dual use of vacuum packers, slicers and mincers unless they can be dismantled and fully disinfected between uses | 21% |
| Equipment such as temperature probes, weighing scales and mixers can be dual-use if there is a safe cleaning and disinfection procedure between uses | 16% |
| Separation controls should be appropriate to business activities, what is achievable and the risk posed | 9% |
| Utensils (including chopping boards) can only be dual-use if they are sanitised or heat disinfected between uses | 4% |
| No requirement to check dishwasher temperature unless there is a reason to think the dishwasher is not operating correctly | 3% |
| Other | 4% |
| Don't know | 1% |
| Base | 104 |

During the focus group, when prompted, Officers outlined a wide range of new advice from the most recent guidance on *E. coli* cross contamination. Most were aware of changes to the advice concerning dishwashers, specifically the change in emphasis on temperature of rinse cycles. Officers also demonstrated awareness of more flexibility for businesses regarding dual use of complex equipment, a greater consideration of risks associated with unwashed vegetables and time separation. Other advice that officers were aware of included changes to cleaning procedures and risks associated with skewered meat. One participant struggled to recall any new advice since it had been perceived to be implemented a while ago (2014).

"There has been a change of emphasis on dishwashers and the temperature of rinse cycles. Also there is an emphasis on clean areas rather than raw areas."

Most Officers had received information in relation to the changes through an email or enforcement letter from the FSA, which was preferred by all but one Officer who felt that the Regulatory Information and Management system (RIAMS) worked better to communicate such information. Those who preferred email or letter felt that it was quick and effective to extract, interpret and circulate information using these methods.

All Officers agreed that it took a short period of time to become familiar with the revised guidance. Most spent a matter of 2-3 hours whilst one participant spent a few days to read and understand the guidance and share information with team members. Subsequently it would have taken a further few days for team members to implement the changes in practice. Cost implications were minimal with only a small minority of Officers reporting that they took time out to update their knowledge and brief team members regarding the changes

"It did not take very long at all to become familiar with the revised guidance. It was used by my officers as soon as it was published. It probably took an hour to read, then an hour to discuss at a team meeting, then 5-10 visits per officer to get experience at implementing it in practice at an actual food business"

In terms of updating food businesses about the new guidance, the vast majority of Officers provided information during inspection visits in the form of discussions and provision of links to the revised documents in inspection reports. During these discussions food businesses were signposted to the FSA website and encouraged to read and become familiar with the changes. Additionally social media such as, twitter and Facebook was utilised to communicate the changes. A small minority of businesses posted or physically provided fact sheets, Safer Food Better Business (SFBB) packs and diaries to businesses, though most shared information electronically to avoid cost.

"We would be unlikely to post hard copies of the guidance due to high cost. We would definitely disseminate the guidance electronically only now"

3.5 Views on guidance

3.5.1 Ease of understanding

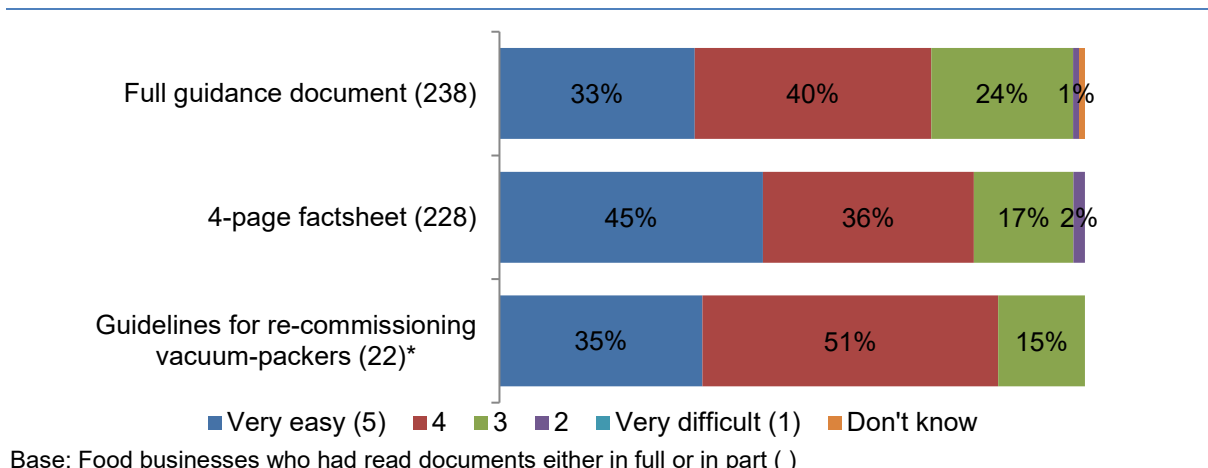
3.5.1.1 Food businesses

Food businesses were asked, for each of the materials they had either read in full or in part, how easy or difficult it was to understand.

The majority of respondents found the materials easy to understand with four in five respondents giving the factsheet a score of 4 or 5 out of 5 (81%) and a similar proportion (86%) of those using complex equipment giving the guidelines for re-commissioning vacuum-packers a score of 4 out of 5. The document that was perceived as the least easy to understand was the full guidance, however close to three quarters of respondents gave this a score of 4 or 5 out of 5 (73%), and there were no instances where a score of '1 – very difficult' was provided.

There appears to be an increase in how easy the materials are to understand from the 2012 research where 67% gave the full guidance a score of 4 or 5 out of 5 and 74% gave the factsheet a score of 4 or 5 out of 5.

Figure 11: Ease of understanding of documents (food businesses aware of documents)



Unsurprisingly those whose first language is English were more likely to say the documents were easy to understand than those whose first language was not English:

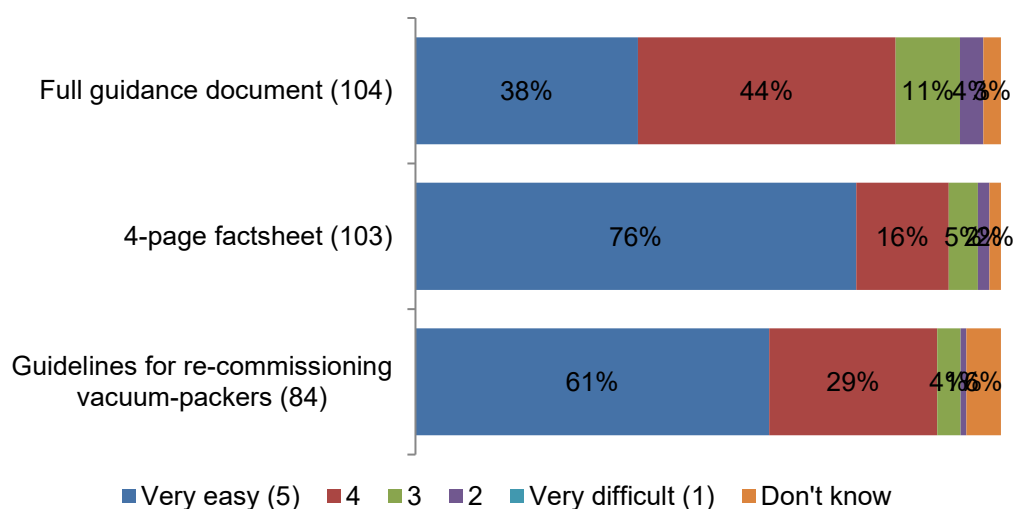
- Full FSA guidance (76% gave a score of 4 or 5 cf. 59% of those non English)
- Factsheet (84% gave a score of 4 or 5 cf. 68% of those non English).

3.5.1.2 Officers

Officers were asked, for each of the materials they were aware of, how easy they personally found the document to understand.

The majority of Officers found the materials easy to understand with nine in ten giving the factsheet and the guidelines for re-commissioning vacuum-packers a score of 4 or 5 out of 5 (91% and 89% respectively). The document that was perceived as the least easy to understand was the full guidance. However this was still rated highly with over four fifths of Officers giving this a score of 4 or 5 out of 5 (83%). There were no instances where a score of '1 – very difficult' was provided for any of the materials.

In the 2012 research close to two thirds of Officers (63%) rated the full guidance as easy to understand.

Figure 12: Ease of understanding of documents (Officers aware of documents)

Base: Officers who were aware of documents ()

3.5.2 Improvements to guidance

3.5.2.1 Food businesses

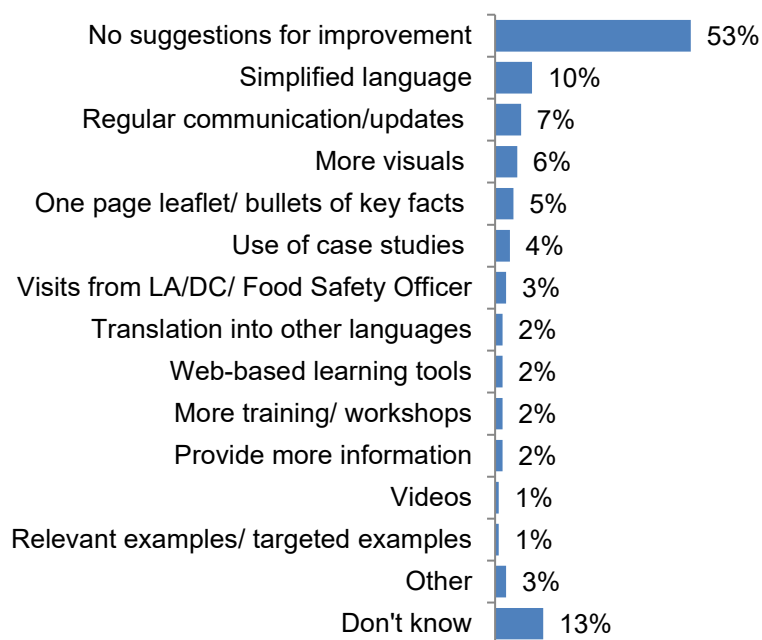
The few food businesses who said the documents were difficult to understand (10 in total) were asked why this was the case.

Issues mentioned by one or two respondents included the length of the document (in relation to the full guidance), language problems, the need for the document to be simplified, the difficulty of putting it into practice and a lack of relevance for their business.

All food businesses who had read one of the documents in full or in part were asked unprompted how the FSA could improve their guidance on *E. coli*.

Over half of respondents (53%) could not suggest any improvements to the guidance, and a further one in ten (13%) did not know how it could be improved. For those who could, the main suggestion was to simplify the language (10%). This was followed by 7% of respondents suggesting that the FSA could communicate more/provide more updates.

Figure 13: Suggestions for improvement to FSA guidance on *E. coli* – unprompted (food businesses who had read documents)



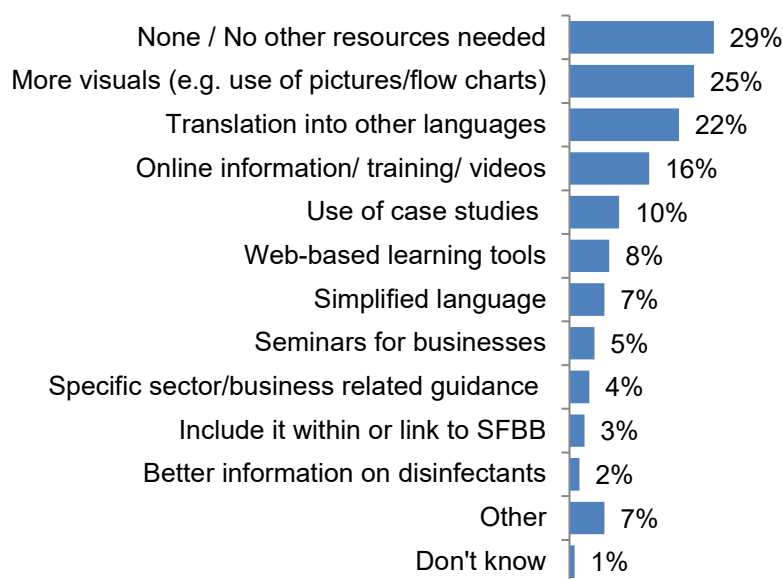
Base: Food businesses who had read one of the documents in full or in part (301)

Unsurprisingly those whose first language was not English were more likely to suggest translation in to other languages as an improvement (8% cf. <0.5% English) and the use of videos (4% cf. 1% English).

3.5.2.2 Officers

Officers were asked unprompted if there were any other resources or methods the FSA could provide that would help businesses better understand the guidance. Officers mentioned a number of resources, with around a quarter suggesting more visuals (25%) or translation into other languages (22%). Close to three in ten Officers (29%) said that no other resources were needed.

Figure 14: Resources or methods the FSA could provide to help businesses better understand guidance – unprompted (Officers)



Base: All Officers (104)

In order to make the guidance more user friendly for businesses, the majority of Officers in the focus group recommended the use of visual communication such as video clips and imagery that offers practical examples/scenarios. The use of TV adverts/programmes, YouTube and famous chefs to promote the guidance was also mentioned by a couple of participants. The importance of using simple terminology in the guidance and making it available in different languages was also highlighted as an important point. Additionally the use of podcasts, online webinar sessions as well as online training courses for businesses were perceived as possible strategies to improve accessibility of the guidance.

“The FSA should make a TV programme featuring a famous chef to promote the guidance. Then let us preview it and spread the word to businesses that it's on at a particular time.”

“To make the guidance more user friend for businesses the FSA should produce it in different languages. They could also produce pod casts and give businesses access to online webinar type sessions.”

“Online training courses for food businesses would help with 5-10 minute toolbox tasks. This is what the HSE use for health and safety.”

However, during the focus group, Officers highlighted that frequent changes to the guidance documents are not well received by food businesses, as they tend to complain about inconsistencies and having to stay up-to-date with them. A few Officers were sceptical about the guidance surrounding compliant/BS cleaning products and believed that alternative products may be equally effective in controlling risks. Many businesses use chemicals that are similar and equally effective but are penalised with lower ratings.

“FBOs are quick to use the inconsistency criticism and changes in guidance are seen as a nuisance.”

“I think that the reliance on using the BS standards of disinfectants causes problems, and businesses which do not use BS approved chemicals may be using something that is similarly effective, but end up with low ratings in some cases. I suppose they have to justify the rationale in their choice of chemical”.

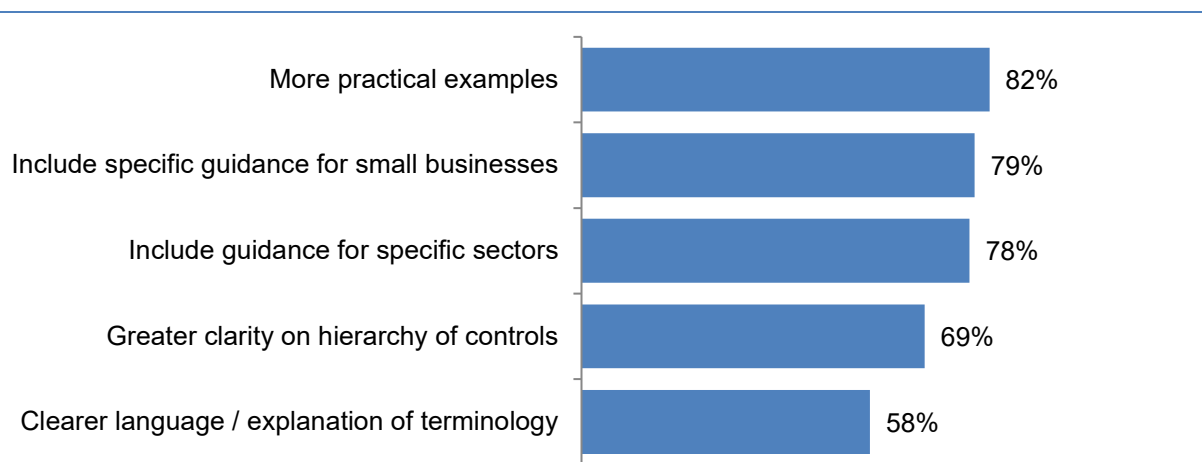
Officers were also asked during the telephone survey how the FSA might improve the guidance to promote understanding among Officers such as themselves. Although Officers said they personally found the documents easy to understand, when prompted, around four fifths of Officers said more practical examples (82%), including specific guidance for small businesses (79%) and including guidance for specific sectors (78%) would promote better understanding among Officers.

A number of unprompted improvements were also mentioned by Officers including:

- More guidance/clarity on vacuum packers or other complex equipment (including visuals) – 3 Officers;
- Training course on guidance – 3 Officers;
- Clearer guidance on legal requirements – 3 Officers;

There were 8 Officers who said no improvements were needed to the guidance.

Figure 15: Suggestions for improvement to FSA guidance on E. coli to promote better understanding amongst Officers – Prompted (Officers)



Base: All Officers (104)

In terms of improvements to the guidance, several Officers during the focus group suggested that more clarity is needed in respect of disinfectant requirements and contact times. Displaying video clips on the FSA website and providing a list of chemicals that can be used or are banned were perceived as useful for businesses. Some proposed that the guidance should be more tailored to specific types of businesses to make it applicable and easier to follow by providing practical examples. One officer mentioned that generic colour coding of boards does not concur with the guidance, and can be confusing for businesses. Therefore businesses identify a need to review the consistency of the colour coding used commonly to make information easier to understand. Although the hierarchy of control was perceived as relatively easy to understand and apply by most Officers, they did emphasise it may be difficult for small businesses.

“There may be a better way of obtaining the assurance that a chemical has disinfectant properties. I think the only way around this is to have a list that businesses must use and any others are banned”.

“The flow chart about separation is easy to follow for us as enforcement officers, but often small businesses are not confident, able or bothered to digest such information.”

Furthermore a few Officers mentioned that the full guidance document was seen as too long and difficult to understand by businesses. Aside from the former, Officers found it difficult to get food businesses to follow and understand a number of aspects of the guidance which included:

- Use of disinfectants/sanitizers and contact times;
- Re-use of plastic containers for raw and ready to eat food;
- Separation of equipment;
- Thermal disinfection with dishwashers;
- Use of complex equipment.

“The guidance has to be as simple as possible. Unfortunately a small business will (generally) not spend time digesting a 26 page document, they just want to know what to do and how to do it”.

All Officers during the focus group said they had raised issues concerning the guidance through the Local Authority food hygiene focus group, which is organised by the Chartered Institute of Environmental Health (CIEH) and comprises FSA regional representatives from Wales, Northern Ireland and England as well as other public health bodies.

3.6 Implementation of guidance

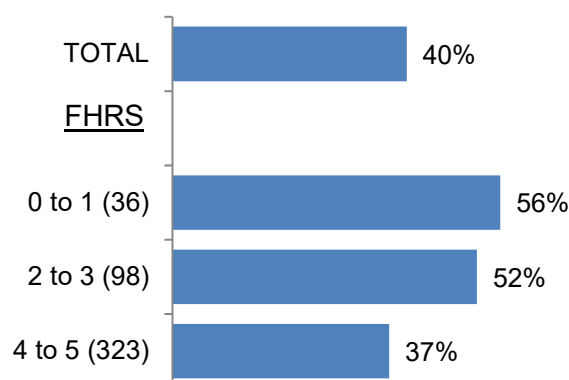
3.6.1 Food businesses

3.6.1.1 Changes made as a result of FSA's guidance

Food businesses that were aware of the FSA's advice on *E. coli* were asked whether they had made any changes to working practices at that site as a result of the FSA's guidance on cross contamination. Two in five respondents (40%) said they had made changes to working practices, an increase on the 31% who did so in the 2012 research.

As can be seen in the figure overleaf this was greater among those with a lower food hygiene rating score, reflecting their greater need to take action in response to the guidance.

Figure 16: Whether made changes to working practices as a result of FSA guidance (food businesses aware of FSA's guidance by food hygiene rating)



Base: Food businesses aware of FSA's advice (457)

In addition to the differences by food hygiene rating, those whose first language was not English were also more likely to have made changes to working practices (53% cf. 37% English) which as mentioned previously reflects the greater number of non English respondents with a lower food hygiene rating.

Respondents from food businesses categorised as childcare/caring premises sector were least likely to have made changes to working practices (29% cf. 40% total), reflecting their greater likelihood of having a food hygiene rating of 5 (76% compared to 65% total sample).

Considering this across all business types, as shown in figure 17 below, it is apparent that food businesses categorised as takeaways and sandwich shops remain the greatest challenge in terms of taking action as a result of the guidance, and do not follow the trend indicated by other business types, i.e. that the likelihood of taking action increases as the proportion with a rating of 5 decreases.

While two in five (43%) takeaways and sandwich shops have a rating of 5, the lowest proportion of all the business types, they are also among the least likely to have made any changes as a result of the guidance (38%).

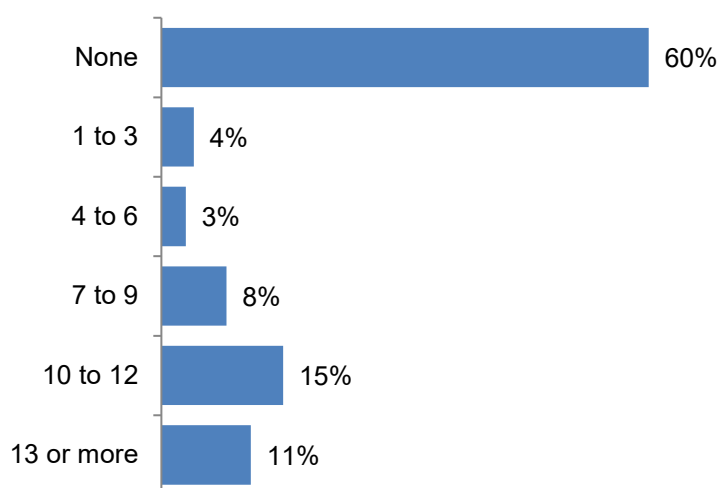
Figure 17: Whether made changes to working practices as a result of FSA guidance and proportion of businesses with a food hygiene rating of 5 (food businesses aware of FSA's guidance)

| Business Type | % made changes to working practices | % Food hygiene rating 5 |
|-----------------------------------|-------------------------------------|-------------------------|
| Other catering premises | 47% | 64% |
| Restaurant/Cafe/Canteen | 41% | 68% |
| Hotel/bed & breakfast/guest house | 40% | 70% |
| Takeaway/sandwich shop | 38% | 43% |
| Childcare/Caring Premises | 29% | 76% |

Those respondents who said their food business had made changes to working practices as a result of the FSA's guidance were then prompted with a list of 15 changes they could have made relating to physical separation, time separation, cleaning/disinfection and personal hygiene/hand washing.

While 60% of food businesses reported having made no changes as a result of the guidance, a quarter (26%) had made ten or more changes, and a further 15% had made up to nine changes.

Figure 18: Number of changes made to working practices as a result of FSA guidance (food businesses aware of FSA's guidance)



Base: Food businesses aware of FSA's advice (457)

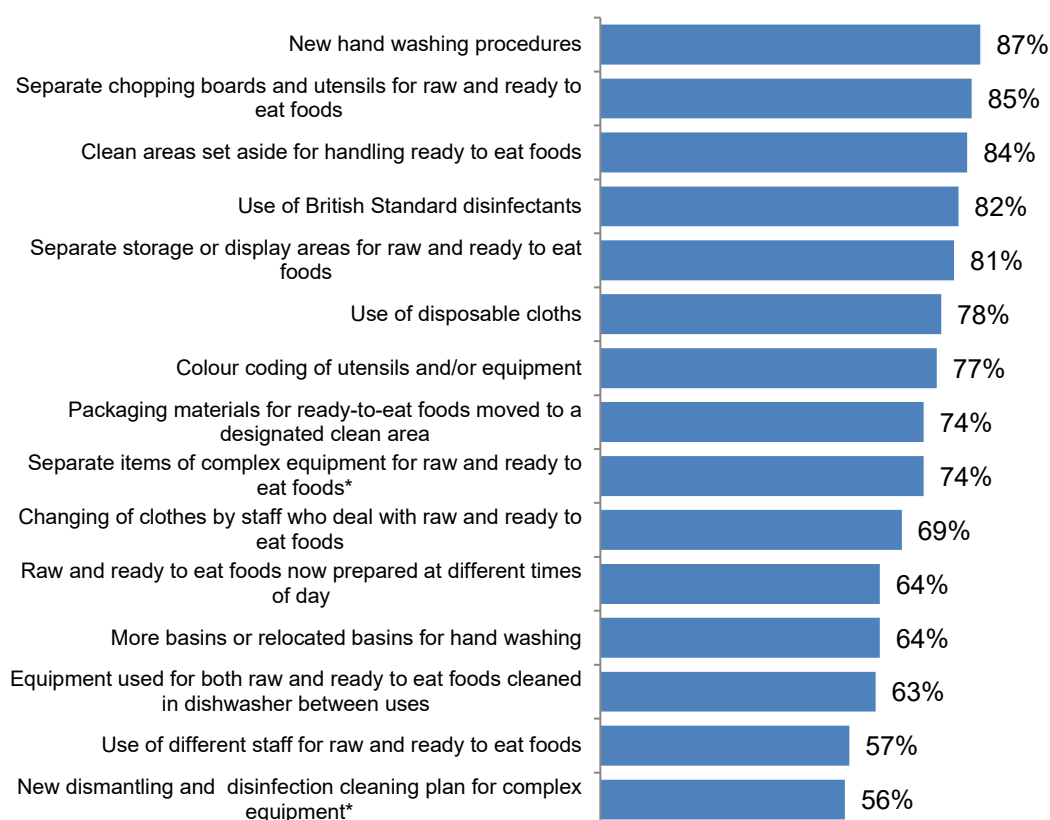
The figure overleaf details the changes made as a result of the FSA's advice.

The top three changes made by respondents as a result of FSA guidance were 'new hand washing procedures' (87%) followed by 'separate chopping boards and utensils for raw and ready to eat foods' (85%) and 'clean areas set aside for handling ready to eat foods' (84%).

The 15 changes were categorised into four areas, with the majority of respondents making at least one of the changes highlighted in each area:

- Physical separation – 95%;
- Personal hygiene and hand washing – 92%;
- Cleaning and disinfection – 90%;
- Time separation – 64% (although this category only had one change in it).

Figure 19: Changes made to working practices as a result of FSA guidance – prompted (food businesses that had made changes to working practices)



Base: Food businesses that had made changes (191) * Those using complex equipment (26)

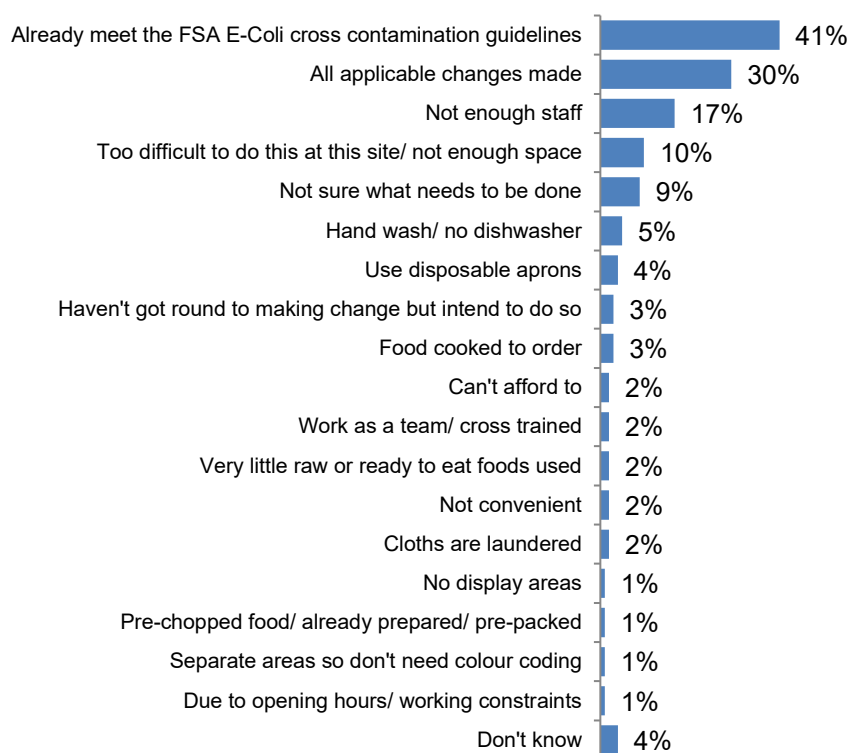
3.6.1.2 Reasons for not making changes

Food businesses who had made at least one change to working practices, but had not made other specific changes as a result of the FSA’s guidance, were asked why this was the case, with each respondent asked about a maximum of two changes not made by their organisation.

Reassuringly over two in five (41%) said this was because they were already meeting the FSA guidelines in relation to the specific change in practice, and a further three in ten (30%) that they had made all the changes that were applicable to their business.

More substantive reasons for not making changes were reported as not having enough staff to make the change (17%), the site itself making it difficult to make the change (10%) and a lack of clarity as to what needs to be done (9%).

Figure 20: Reason for not making particular changes – unprompted (food businesses aware of FSA’s guidance that had made some but not all changes)



Base: Food businesses that had made changes to working practices (191)

Those respondents who said they had not made any changes to working practices (266 in total) following the FSA’s advice were also asked why this was the case.

Again reassuringly the majority (91%) of respondents said they had not made any changes to working practices following the FSA’s advice as they were already meeting the guidelines. Other low level reasons for not making changes included the following:

- Not sure what needs to be done (2%);
- Haven’t got round to it, but intend to do so (1%);
- Too difficult to do at this site/not enough space (1%);
- Not enough staff (1%);
- New business (1%).

There were no significant differences in reasons for not making changes by those businesses that were a single site compared to those who were part of a multiple site or chain.

Looking overall at those who had not made changes to working practices, unsurprisingly those in the lower food hygiene rating (0 to 2) were less likely to claim that this was due to the fact they were already meeting FSA guidelines/all applicable changes had been made (72% cf. 84% food hygiene rating of 3 to 5). This appears to still be a high percentage given the lower food hygiene rating and should be taken with some caution given the degree of scepticism around the claims.

Those food businesses categorised as hotels/B&B/guest houses were more likely to say it was too difficult to do at this site or there was not enough space (16% cf. 4% total sample).

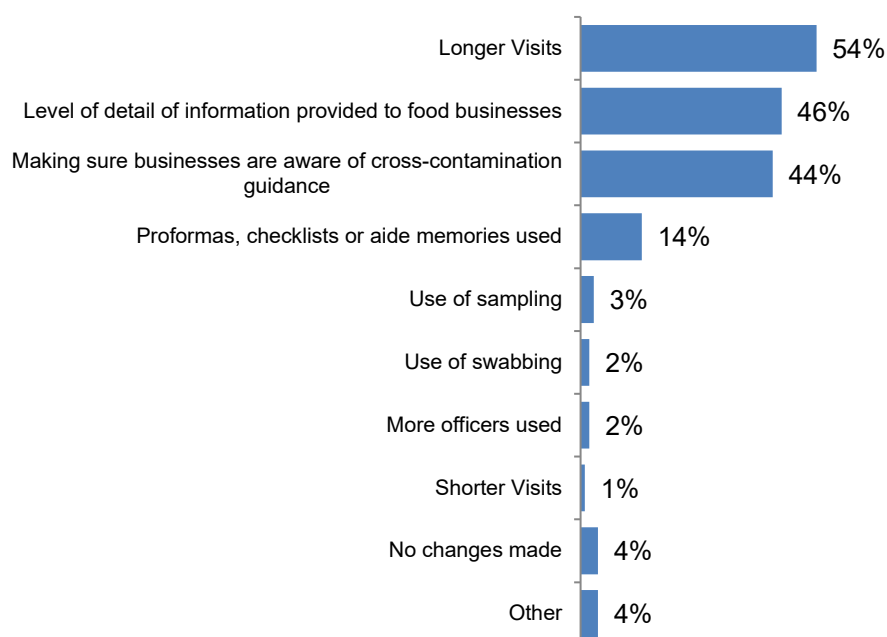
It is worth noting that with regards to the reasons for not making changes, the methodology employed has limitations due to the length of the survey and the fact that this could not be explored further or verified.

3.6.2 Officers

3.6.2.1 Inspection changes

Over a half of Officers said they had increased the length of their inspection visits when asked unprompted what changes they had made to their inspection visits as a result of the FSA guidance (54%, which compares to 21% in 2012). Close to a half also mentioned they had changed the level of detail of information provided to food businesses (46%, which compares with 30% in 2012) and a similar proportion (44%) mentioned that they made sure businesses were aware of cross-contamination guidance (in line with the 49% who reported this in 2012).

Figure 21: Changes made to inspection visits as a result of FSA guidance – unprompted (Officers)



Base: All Officers (104)

Some Officers in the focus group mentioned they made changes to their practices/inspections following the changes to the FSA guidance, whilst others reported that they did not make any significant changes. Those who did make changes suggested that their inspections were longer and more focussed on the changes to ensure that the guidance changes and its implementation were emphasised. They also had more internal discussions to brief the team of changes and ensure they are understood. Some Officers updated their inspection *pro forma* to capture relevant information for audit purposes/ effective assessment and amended advice and letters to reflect the changes. Others are now using relevant assessment tools e.g. dishwasher probe to check rinse temperatures and disposable plastic aprons to support inspection visits. One Officer developed additional materials based on the SFBS pack to support students and businesses.

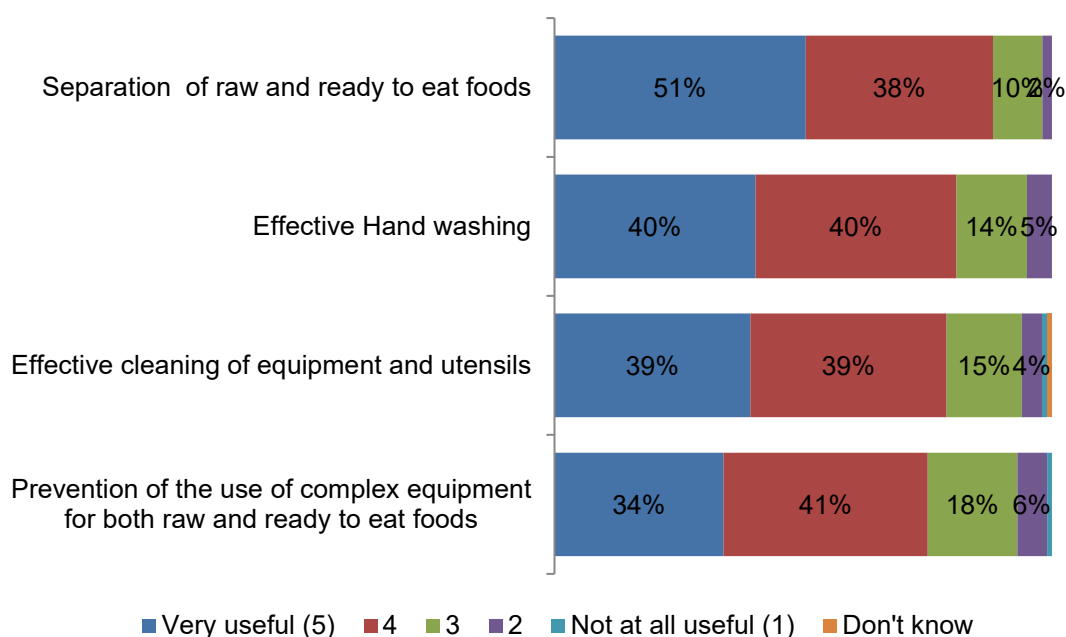
“Following the changes to the FSA guidance, we updated our inspection pro forma to capture relevant parts for audit purposes and effective assessment.”

“We have updated our inspection aide memoir. We carry disposable plastic aprons and bought dishwasher proof probes for checking rinse temperatures. Our inspections are more focused on the changes.”

3.6.2.2 Usefulness of materials

Officers were asked on a scale of 1 to 5 where 5 is very useful and 1 is not at all useful how useful the FSA’s guidance material are in helping them tackle a number of different cross-contamination issues. At least three quarters of Officers said the guidance materials were useful for tackling all the different cross-contamination issues outlines, and particularly so for tackling the separation of raw and ready to eat foods, with close to nine in ten (88%) providing a score of 4 or 5 out of 5.

Figure 22: Usefulness of FSA’s guidance materials in helping Officers tackle the following cross-contamination issues (all Officers)



Base: All Officers (104)

The small number of Officers who said that the guidance material was not useful, and gave a score of 1 or 2 out of 5 for any of the elements, were asked why the guidance materials were not useful.

The reasons the materials were not deemed as useful with regards to effective hand washing was due to the fact that Officers felt you need to physically show businesses what to do and they felt that there is better information regarding hand washing, such as NHS guidance. Officers also felt this area of the guidance was patronising for businesses as well as Officers having difficulties with what constitutes a breach in the guidance.

With regards to effective cleaning of equipment and utensils reasons the materials were not useful included the lack of differentiation between what they must do and what is a recommendation, lack of practical detail, the need for more guidance on storage containers where businesses do not have a dishwasher and the fact that you need to use two temperature probes on raw meat as they cannot be chemically disinfected between uses.

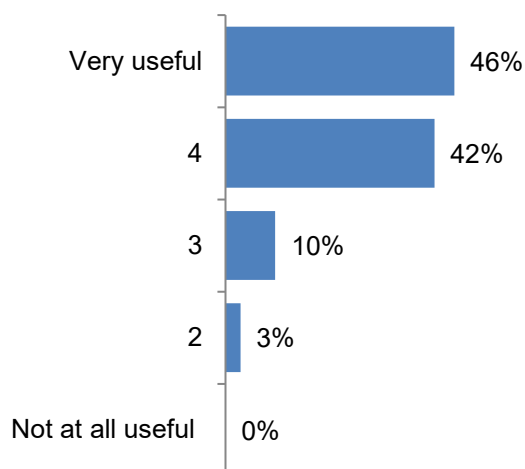
The reasons the materials were not deemed as useful with regards to the prevention of the use of complex equipment for both raw and ready to eat foods was due to the fact that the information is too complex and that more examples of what is meant by complex equipment is needed as well as what equipment can be dual use. This area was deemed as the main issue and the area that Officers needed more guidance on. Officers also mentioned the fact that the guidance on this had been back tracked before and it was felt that this had weakened the guidance.

Officers felt the guidance was not useful with regards to the separation of raw and ready to eat foods as the message gets lost due to the level of detail in the guidance and the fact that the information regarding the separation of raw and ready to eat foods is already out there in various formats.

Factsheet

Officers were specifically asked how useful they found the factsheet for caterers in supporting the implementation of the guidance. Officers said they found the factsheet useful with close to nine in ten (87%) giving a score of 4 or 5 out of 5. There were no Officers who said they found the factsheet not at all useful.

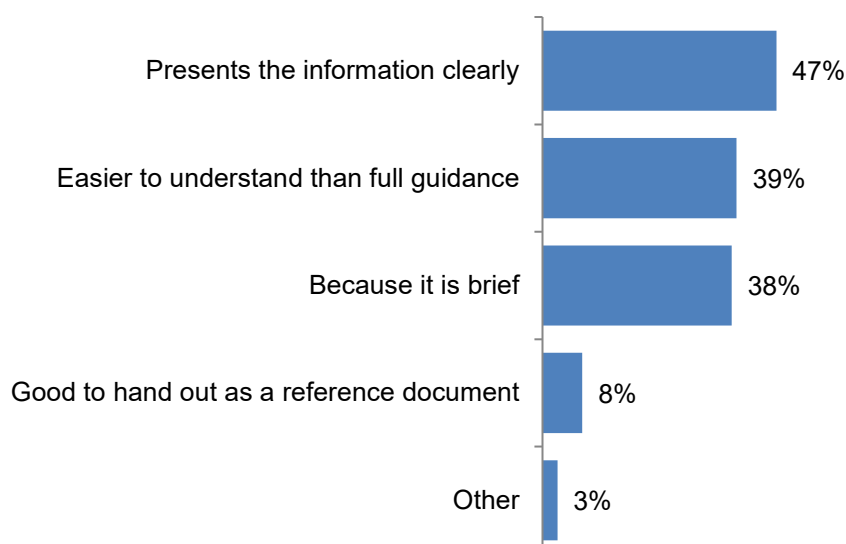
Figure 23: Usefulness of factsheet to support implementation of the guidance (Officers aware of factsheet for caterers)



Base: Officers who were aware of factsheet (103)

Those who said they found the factsheet useful (and gave a score of 4 or 5) were asked in what way the factsheet had been useful. Close to a half (47%) said the factsheet had been useful as it presented the information clearly with around two fifths also stating it was easier to understand than the full guidance (39%) and it was brief (38%).

Figure 24: Reasons factsheet has been useful (Officers who found factsheet useful)



Base: Officers who found factsheet useful (90)

3.7 Difficulties in implementing guidance

3.7.1 Food Businesses

Food businesses that had made one or more changes to their working practices following the FSA's advice were asked if they had experienced any difficulties when making changes to working practices.

Of the 40% of businesses who had made changes to working practices, the majority (95%) said they had experienced no difficulties when making changes to working practices and this did not vary by sub group.

The very small number of respondents who reported they had difficulties (9 businesses in total) were asked what difficulties they had experienced, and these included:

- Staff cultural issues, getting staff to change their ways in general and getting staff to understand reasons for doing things differently;
- The time, persistence and willingness needed to change practices;
- Issues with separating the preparation of raw and ready to eat foods due to space;
- Sanitiser issues as it takes too long to work;
- Issues with regards to changing type of menu and the changes required then.

Food businesses that were aware of the FSA's advice and had employees were asked unprompted if there were any areas of the FSA's advice that were particularly difficult to get staff to put into practice.

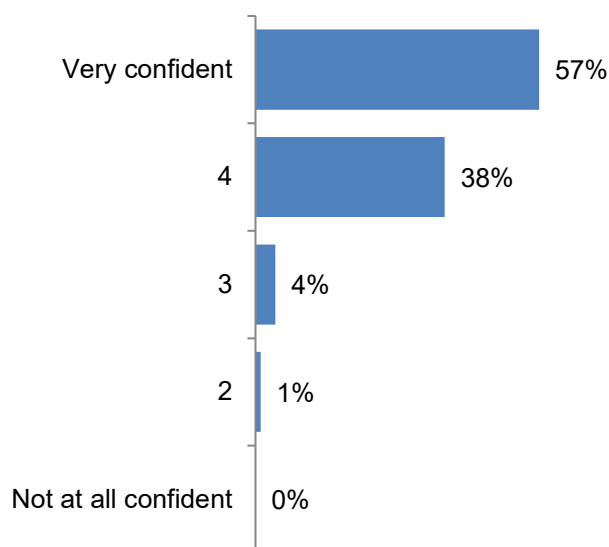
The majority of respondents (95%) said there were no areas that were difficult to get staff to put into practice. Low level difficulties cited by more than one respondent included:

- Separation of areas for raw and ready to eat foods (7 mentions);
- Cleaning procedures (4 mentions);
- More training/build up knowledge in staff (3 mentions);
- Perceived laziness of the staff (2 mentions).

3.7.2 Officers

Officers said they felt confident applying the FSA guidelines when visiting food businesses with the majority (95%) giving a score of 4 or 5 out of 5 (which compares favourably with the 70% of Officers who did so in 2012). There were no Officers who said they did not feel at all confident applying the guidance.

Figure 25: Feeling of confidence applying FSA guidelines when visiting food businesses (Officers)



Base: All Officers (104)

All Officers reported during the focus group that they felt confident applying the guidance in practice when visiting food businesses. Officers' confidence stemmed from their extensive experience in the sector and thorough knowledge and understanding of the guidance. Complex equipment guidance was also perceived as straightforward. However, some Officers highlighted that application of the guidance as a basis for enforcement could be challenging. Therefore, opportunities to discuss the enforcement approach and ensure risk is appropriately documented may improve confidence.

"We are pretty confident applying the guidance if they are compliant. The tricky part is trying to use "guidance" as the basis for enforcement."

Most Officers believed that personal judgement based on their experience and knowledge is essential when visiting food businesses, although following the guidance alongside the use of personal judgement also facilitates consistency in practice. Other measures such as training sessions, team meetings/discussions, monitoring/shadowed visits and consistency exercises were also implemented by Officers to maximise consistency in application.

"Officers always use personal judgement, but using guidance helps with consistency. There is more scope for inconsistency where guidance does not exist or is not clear."

Many Officers expressed that they found it challenging to balance the enforcement of guidance with specific businesses. This was mainly due to the lack of ability to verify whether businesses were actually putting the guidance into practice, as they were limited to observing practices during the time of inspection only. However, the risk assessment usually informs when enforcement or informal advice should be applied.

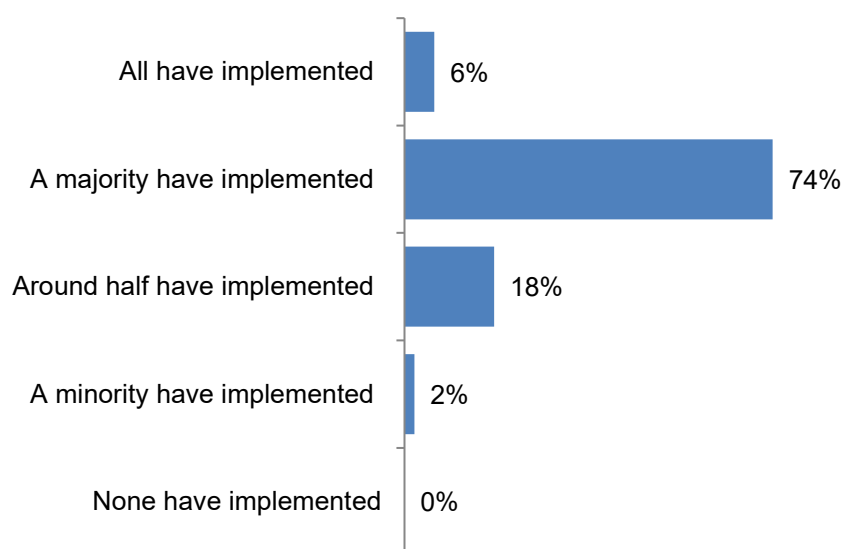
"It is not easy to balance this but the justification on the risks posed should steer the officer to know when to enforce or when to leave as informal advice."

"It is easy for a business to state that they separate by time but difficult to always verify this as it depends what is happening at the time of inspection."

Four in five Officers (80%) said that either all or the majority of the businesses they had visited had implemented the controls which are applicable to their business, as detailed in the FSA guidance on *E. coli*. This compares with the 50% of Officers who did so in the 2012 research.

There were no Officers who said that none of the businesses they visited had implemented the controls.

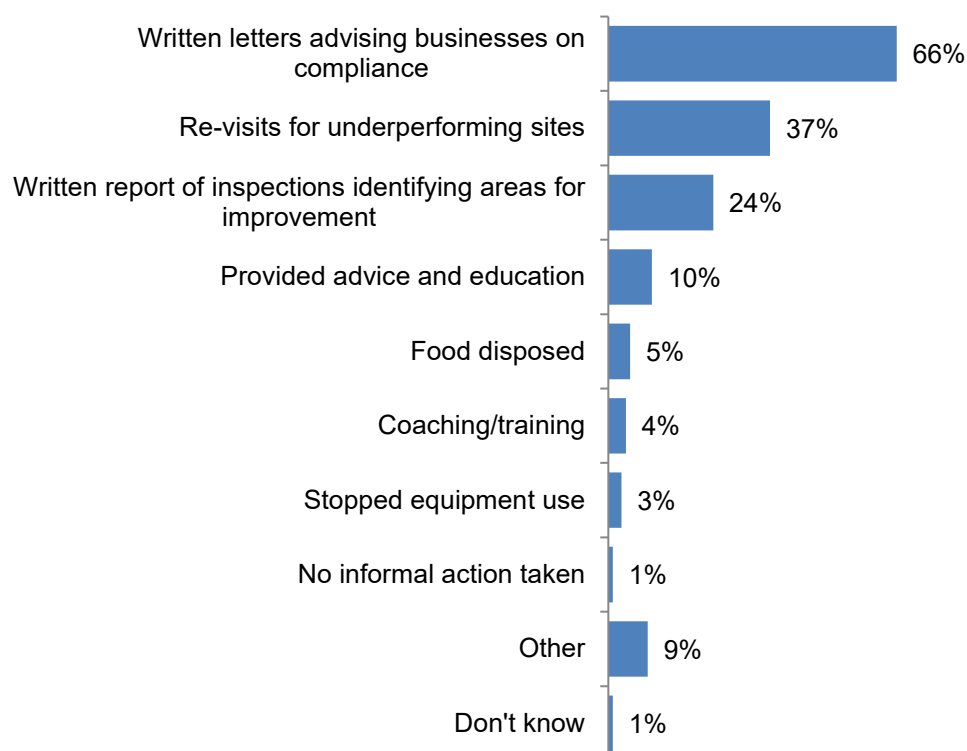
Figure 26: Extent to which food businesses visited have fully implemented the controls applicable to their business (Officers)



Base: All Officers (104)

When asked what informal actions they take for businesses who have not implemented the guidance, two thirds of Officers (66%) mentioned that they wrote letters advising businesses on compliance. Over a third of Officers (37%) said they re-visited businesses where they were underperforming and close to a quarter (24%) that they wrote an inspection report which identified the areas for improvement.

Figure 27: Informal actions taken where businesses have not implemented guidance – unprompted (Officers)



Base: All Officers (104)

The focus group discussion indicated that actions taken by Officers for businesses that did not implement the guidance were dependent on the associated risks that their practices posed. Most of the Officers in the focus group said they revisited the business and provided education and training to improve adherence to the guidance. Subsequently actions were agreed with the businesses to put in to practice and these were followed up and reviewed by Officers. A few Officers in the focus group sent notices, advisory letters and in some cases revised businesses' hygiene ratings depending on the degree of seriousness. Amidst these actions, Officers in the focus group also acknowledged that it was not a legal requirement to enforce the guidance.

“We offer training and revisits. It is difficult to enforce guidance”

“It would depend on the specific circumstances and the risk to the consumer. In the first instance we would provide an advisory letter if there is no immediate risk, it is simple to rectify and have confidence in the business.”

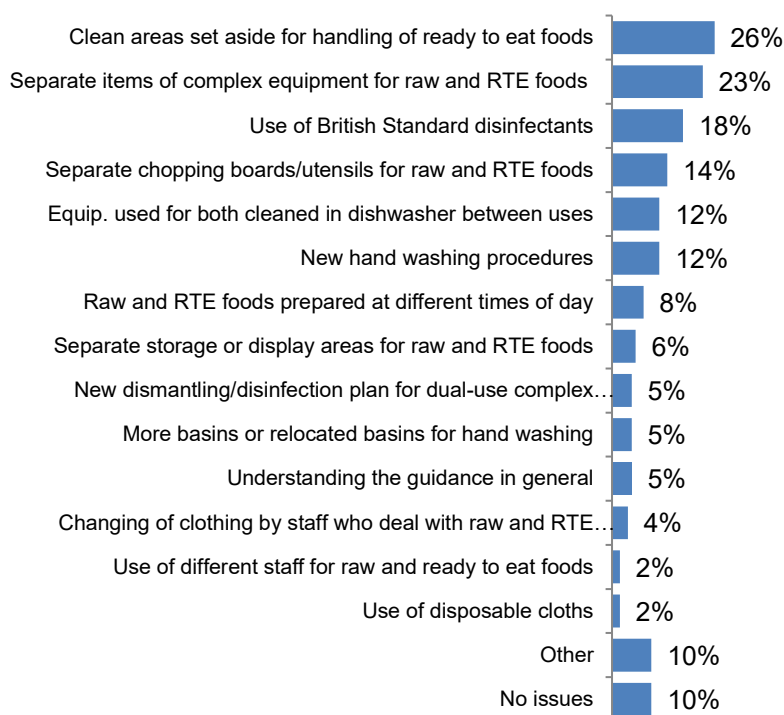
Officers were asked unprompted which aspects of the guidance caused problems for food businesses. As can be seen in the figure below, the main area that Officers felt caused problems for businesses were connected with physical separation, with over a half of Officers (57%) mentioning this.

Figure 28: Summary of guidance aspects that cause problems for businesses (Officers)

| | % |
|-----------------------------------|-----|
| Physical separation | 57% |
| Cleaning and disinfection | 34% |
| Personal hygiene and hand washing | 18% |
| Time separation | 8% |
| Base | 104 |

Specifically, Officers felt it was the clean areas set aside for handling ready to eat foods and separate items of complex equipment for raw and ready to eat foods that caused the most problems for businesses with around a quarter mentioning these (26% and 23% respectively). Officers also felt that the use of British Standard disinfectants was a problem for businesses with close to a fifth (18%) mentioning this.

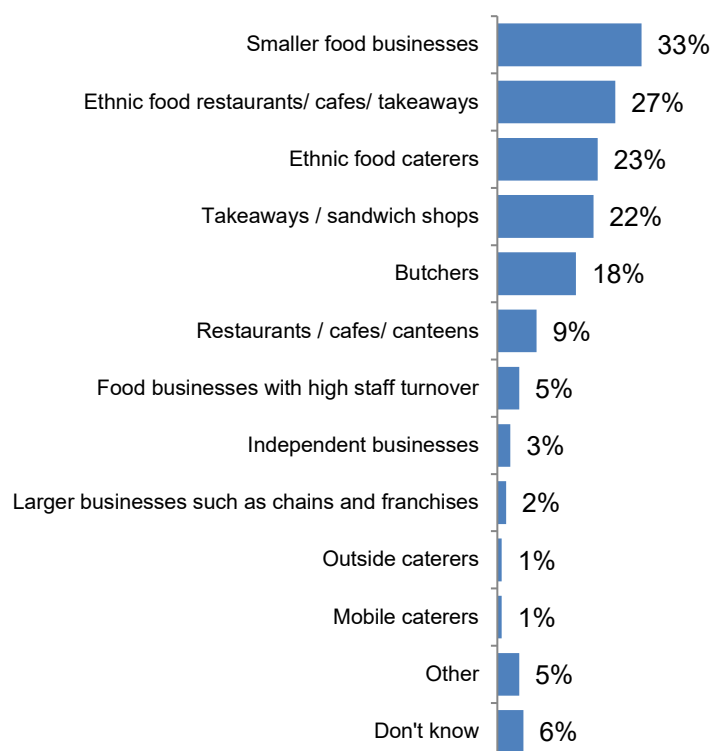
Figure 29: Guidance aspects that cause problems for businesses – unprompted (Officers)



Base: All Officers (104)

Officers felt it was more likely to be ethnic businesses that experienced problems implementing the FSA's guidance, whether that was restaurants/cafes/takeaways (27%) or caterers (23%) when asked unprompted what businesses they felt would experience problems implementing the guidance. A third of Officers (33%) also mentioned smaller food businesses and just over a fifth (22%) mentioned takeaways/sandwich shops. This is consistent with those businesses that were most likely to have a lower food hygiene rating.

Figure 30: Food businesses likely to experience problems implementing guidance – unprompted (Officers)



Base: All Officers (104)

This was also evident in the focus group, with Officers mentioning in particular small independent businesses such as takeaways and pubs who were more likely to struggle in following the guidelines due to pressures that result from limited resources. Ethnic businesses where English is not the first language of staff may also struggle, especially when reading chemical labels, safety data sheets and the full guidance document. Inexperienced businesses or those who are described as 'fixated' in their old ways may also find it challenging to follow the guidance.

"Premises where English is not a first language have trouble reading the FSA guidance as well as chemical labels, safety data sheets, etc".

3.8 Overview of those unaware of FSA's advice

Before ending the survey, those food businesses who were not aware of the FSA's advice on *E. coli* (44 respondents in total) were asked a number of questions about the equipment they used and how they stopped bacteria spreading between raw and ready to eat food.

There were only 5 businesses who were not aware of the FSA's advice that said they used complex equipment and all of these respondents reported not using the same item of complex equipment for both raw and ready to eat foods.

Of the 44 respondents who were not aware of the FSA's advice on *E. coli* over a third of them (37% or 16 respondents) said they used the same individual item to prepare or store both raw and ready to eat foods and the items that respondents were prompted with included chopping boards, knives, sinks and fridges.

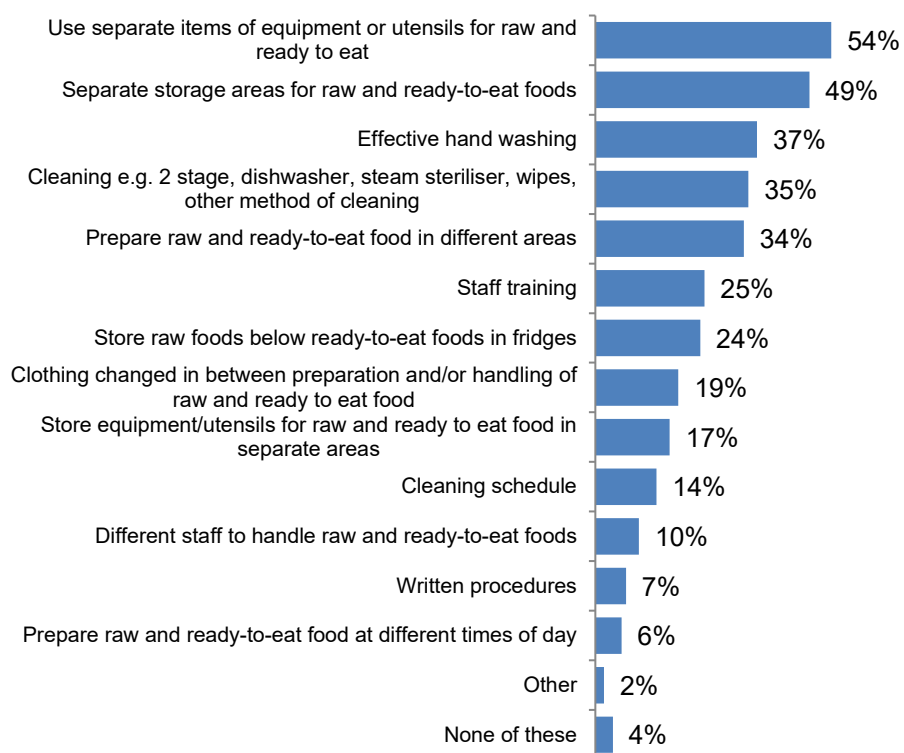
The 16 respondents who said they used the same individual item were then asked unprompted how they stop bacteria from raw food being passed to ready to eat foods. The following precautions were mentioned:

- 2 stage cleaning (6 respondents);
- Dishwasher (4 respondents)
- Sanitiser (3 respondents);
- Staff training (3 respondents);
- Steam steriliser (2 respondents);
- Temperature probe wipes (2 respondents);
- Another method of cleaning (2 respondents);
- Separate areas within fridge (2 respondents);
- Prepare raw and ready to eat foods at different times of the day (1 respondent).

In summary 11 out of the 16 respondents mentioned some form of cleaning.

Respondents who were not aware of the FSA's advice were also asked whether they do anything else not already mentioned to stop bacteria from raw food being passed to ready to eat foods. This question was asked on a prompted basis, and many respondents reiterated things previously mentioned. The figure below therefore summarises the responses to both questions regarding the procedures put in place to stop the transfer of bacteria between raw and ready to eat foods.

Figure 31: Procedures put in place to stop transfer of bacteria (food businesses unaware of FSA's guidance)



Base: Food businesses unaware of guidance (44)

Appendix 1: Profile of food businesses

| Region | % |
|----------------------------|-----|
| South East | 17% |
| North West | 15% |
| East of England | 10% |
| London | 10% |
| West Midlands | 10% |
| South West | 9% |
| Yorkshire and The Humber | 7% |
| East Midlands | 6% |
| Wales | 6% |
| Northern Ireland | 4% |
| North East | 3% |
| Base (All food businesses) | 501 |

| Number of employees at site | % |
|-----------------------------|-----|
| 1 - myself only | 2% |
| 2-4 | 24% |
| 5-9 | 24% |
| 10-24 | 29% |
| 25-49 | 13% |
| 50-99 | 5% |
| 100-199 | 2% |
| Base (All food businesses) | 501 |

| Business handles and/or prepares | % |
|----------------------------------|------|
| Raw fruit, vegetables or salad | 85% |
| Raw red meat or poultry | 87% |
| Ready-to-eat foods | 100% |
| Base (All food businesses) | 501 |

| Nature of business | % |
|----------------------------|-----|
| Single site | 67% |
| Multiple site (eg Chain) | 33% |
| Base (All food businesses) | 501 |

| Part of a Primary Authority Partnership (PAP) | % |
|---|-----|
| Yes | 7% |
| No | 63% |
| Don't know | 30% |
| Base (Food businesses in England and Wales) | 484 |

| First language | % |
|----------------------------|-----|
| English | 84% |
| Non English | 16% |
| Base (All food businesses) | 501 |

| Type of food prepared/served at site | % |
|--|-----|
| English | 62% |
| European | 16% |
| A mix of different cuisine | 7% |
| Indian/Bangladeshi | 4% |
| Chinese | 4% |
| American | 2% |
| Mexican | 1% |
| Thai | 1% |
| Other | 2% |
| Base (Food businesses that are restaurants/cafes/canteen, takeaway/sandwich shops, mobile caterers or other catering premises) | 383 |

| Food safety or hazard management system | % |
|---|-----|
| SFBB (Safer Food Better Business) | 30% |
| Has system, can't remember the name of it | 24% |
| In-house food safety system | 19% |
| HACCP | 9% |
| Something from FSA | 3% |
| No Food System | 3% |
| COSHH | 2% |
| Cook Safe | 1% |
| Safe Catering | 1% |
| Something from council | 1% |
| Other system | 6% |
| Don't know | 6% |
| Base (All food businesses) | 501 |

Appendix 2: Profile of Officers

| Region | % |
|--------------------------|-----|
| South East | 25% |
| East of England | 15% |
| North West | 14% |
| East Midlands | 11% |
| London | 11% |
| Wales | 10% |
| Yorkshire and The Humber | 5% |
| North East | 4% |
| Northern Ireland | 3% |
| South West | 3% |
| Base (All Officers) | 104 |

| Number of business teams responsible for | % |
|--|-----|
| 500 or fewer | 2% |
| More than 500, up to 1000 | 27% |
| More than 1000, up to 1500 | 31% |
| More than 1,500 up to 2000 | 17% |
| More than 2000, up to 2500 | 12% |
| More than 2,500 up to 3000 | 4% |
| Over 3000 | 7% |
| Base (All Officers) | 104 |

| LA acts as a Primary Authority for businesses | % |
|---|-----|
| Yes | 29% |
| No | 71% |
| Base (Officers in England and Wales) | 101 |

All Officers in the focus group had been an authorised food officer for 18 years or more.

Appendix 3: The questionnaires

Evaluating Guidance on E-coli Control of Cross Contamination - Food Businesses SurveyV12

Evaluating FSA Guidance on E-coli Control of Cross Contamination version 3

S Screener

ASK TELEPHONIST

S1 Good morning / afternoon. My name is [NAME] calling from BMG Research on behalf of the Foods Standards Agency. Please may I speak to the person responsible for food safety at this site?

ADD IF NECESSARY: We are conducting a survey for the Food Standards Agency about the guidance they have issued on the control of E.Coli cross contamination for food businesses.

ADD IF NECESSARY:

BMG abides by the Market Research Society's Code of Conduct and the Data Protection Act so responses are confidential and the findings from the survey will only be used for research purposes. Answers will be fed back in a way that will not permit this organisation to be identified

ADD IF NECESSARY: We want to speak to someone based at this site with responsibility for food safety, not at Head Office. We are only interested in activities at this site

STANDARD CALL OUTCOMES PLUS CODES FOR:

- Refusal company policy
- Refusal – do not handle raw meats/ vegetables AND ready to eat foods
- No-one at site to answer questions
- Company closed

ASK ALL

S2

[IF TRANSFERRED TO CORRECT PERSON, READ OUT] Good morning / afternoon, my name is NAME, calling from BMG Research, an independent research company.

We are conducting a survey for the Food Standards Agency also known as the FSA about the guidance they have issued on the control of E.Coli cross contamination for food businesses. Can I just check, are you the person responsible for food safety at this site?

INTERVIEWER – IF YES, CONTINUE WITH INTERVIEW OR MAKE APPOINTMENT. IF NO, ASK TO BE TRANSFERRED TO CORRECT PERSON AND LOOP THROUGH S2 AGAIN

IF SPEAKING TO CORRECT PERSON AT S1, AND NOT ALREADY DESCRIBED SURVEY, READ OUT:

Evaluating Guidance on E-coli Control of Cross Contamination - Food Businesses SurveyV12

We are conducting a survey for the Food Standards Agency also known as the FSA about the guidance they have issued on the control of E.Coli cross contamination for food businesses.

INTERVIEWER OFFER MORE REASSURANCES AS NECESSARY THEN CONTINUE WITH INTERVIEW OR MAKE APPOINTMENT.

ADD IF NECESSARY:

The interview will last around 10 minutes, depending on your answers

By taking part in the survey, you will be helping the Food Standard Agency to understand how food businesses use their guidance and how it may be improved in the future

The survey is to establish awareness, knowledge, understanding and implementation of the Agency's guidance on the control of E. coli cross contamination

BMG abides by the Market Research Society's Code of Conduct and the Data Protection Act so your responses are confidential and the findings from the survey will only be used for research purposes. Your answers will be fed back to the Food Standards Agency in a way that will not permit you or your organisation to be identified

If respondent wishes to confirm validity of survey or get more information about aims and objectives, they can call:

- **MRS: Market Research Society on 0500396999**
- **BMG Viv Young or Sharon Gowland on 0121 333 6006**

NEW READ OUT: Are you ok to continue?

STANDARD CALL OUTCOMES PLUS CODES FOR:

- **Wants reassurances (send reassurance letter)**
- **Refusal company policy**
- **Refusal – do not handle raw meats/ vegetables AND ready to eat foods**
- **Refusal (other reason not already captured)**
- **Language barrier (capture language needed)**
- **NEW: ADD IN CODE FOR 'THIS NUMBER USED FOR ORDERS, CANNOT PROCEED AT THIS TIME' – INTERVIEWER TO ASK FOR ALTERNATIVE NUMBER// IF NO NUMBER GIVEN CALL AT A DIFFERENT TIME OF DAY**

Evaluating Guidance on E-coli Control of Cross Contamination - Food Businesses SurveyV12

ASK ALL

- S3 We need to speak to food businesses which handle and/or prepare both raw and ready to eat foods. Does your business handle and/or prepare...

INTERVIEWER NOTE: we are interested in speaking to businesses that deal with BOTH raw and ready to eat foods

READ OUT - CODE ALL THAT APPLY

| | | |
|--|---|--|
| Raw red meat or poultry? | 1 | CONTINUE IF MULTICODE 1 AND 3 |
| Raw fruit, vegetables or salad which have not already been washed and labelled as ready to eat? | 2 | CONTINUE IF MULTICODE 2 AND 3 |
| Ready-to-eat foods that can be eaten without further cooking or processing? IF NECESSARY For example, cooked meats, sandwiches, pies, cheese, desserts or pre-washed fruit, salad and vegetables? | 3 | CONTINUE IF MULTICODE 1 AND 3 OR 2 AND 3 |
| DO NOT READ OUT: None of the Above | 4 | THANK AND CLOSE |

DISPLAY IF THANK AND CLOSE: **UNFORTUNATELY YOU DO NOT MEET THE CRITERIA TO TAKE PART AS WE ARE ONLY LOOKING TO SPEAK TO FOOD BUSINESSES THAT HANDLE OR PREPARE RAW AND READY TO EAT FOODS. THANK YOU FOR YOUR TIME TODAY.**

ASK ALL

- S4 Are you aware of the Food Standards Agency's advice on E-coli cross contamination?

NEW INSTRUCTION INTERVIEWER – they need to be aware of the Food Standard Agency's advice. If respondent say they are aware of EColi cross contamination advice but not the FSA's advice, code as no.

IF NECESSARY: This guidance is for food businesses that handle and/or prepare both raw and ready to eat foods and describes the steps that need to be taken to control the risk of food becoming contaminated with E-coli bacteria. The guidance is also used by [England/ Wales: local authority; NI: district council] food safety officers when inspecting businesses

IF NECESSARY: The full guidance was first published in 2011 and was updated in December 2014

| | | |
|--|---|---|
| Yes | 1 | Go to A1 |
| No | 2 | READ OUT IF NECESSARY INSTRUCTIONS IF STILL NO, GO TO A1 |
| Do not read out: Don't know / Not sure | 3 | READ OUT IF NECESSARY INSTRUCTIONS AND RECODE AS NECESSARY. IF STILL NOT SURE, GO TO A1 |

Evaluating Guidance on E-coli Control of Cross Contamination - Food Businesses SurveyV12

A Awareness of E-coli Guidance

ASK ALL

A1 First of all, to help me understand your business, please tell me how many employees, full time and part time, work at this site. Please include yourself and all those on the payroll and exclude non-permanent or agency staff.

INTERVIEWER: we want to know about all employees at this site, not just those that work in the kitchen or prepare food.

IF DON'T KNOW; PROMPT WITH RANGES

CODE ONE ONLY

| | |
|--------------------------------------|----|
| 1 – myself only | 1 |
| 2-4 | 2 |
| 5-9 | 3 |
| 10-24 | 4 |
| 25-49 | 5 |
| 50-99 | 6 |
| 100-199 | 7 |
| 200-249 | 8 |
| 250-499 | 9 |
| 500+ | 10 |
| DO NOT READ OUT: Don't Know | 11 |
| DO NOT READ OUT: Refused - GO TO A1A | 12 |

IF A1=REF OR DK

A1a May I check, is it just yourself or do other people work at this site?

Do not read out, code one only

1. Just respondent
2. Respondent and other staff work at this site

Evaluating Guidance on E-coli Control of Cross Contamination - Food Businesses SurveyV12

ASK ALL

NEW QUESTION A1B And at this site, do you use any complex equipment such as vacuum packers or meat slicers?

IF NECESSARY –

A vacuum packer is a piece of machinery that is used to remove the air from the packaging in which food items are sealed.

| | |
|-----------------------------|---|
| Yes | 1 |
| no | 2 |
| DO NOT READ OUT: Don't Know | 3 |

ASK IF UNAWARE (S4=2,3) AND IF A1B=YES

NEW QUESTION A1c Do you use the same items of complex equipment to prepare both raw AND ready to eat foods?

| | | |
|-----------------------------|---|-----------|
| Yes | 1 | Go to A1d |
| No | 2 | GO TO a2 |
| Do not read out: Don't know | 3 | GO TO a2 |

Evaluating Guidance on E-coli Control of Cross Contamination - Food Businesses SurveyV12

ASK IF A1C=YES (ANY)

NEW QUESTION A1d When using complex equipment, how do you stop bacteria from raw food being passed to ready to eat foods?

INTERVIEWER – examples of complex equipment are vacuum packing machines and meat slicers

DO NOT READ OUT. CODE ALL THAT APPLY (probe to precodes)

| |
|---|
| 2 Stage Cleaning (INTERVIEWER – this involves using a detergent/degreaser AND disinfectant separately – please check that both detergent/degreaser AND disinfectant are used before coding) |
| Dishwasher |
| Steam steriliser |
| Sanitiser |
| Other method of cleaning |
| Prepare raw and ready to eat foods at different times of day |
| Staff training |
| Written procedures (INTERVIEWER – THIS MAY INCLUDE Hazard Analysis and Critical Control Point (HACCP) plan , Safer Food Better Business (SFBB), Cook Safe or Safe Catering) |
| Other (specify) |
| DO NOT READ OUT : NONE OF THESE |

ASK IF UNAWARE (S4=2,3)

A2 IS A REWORKED QUESTION

A2 Thinking about other equipment at this site, such as chopping boards, knives, sinks and fridges, do you use any **INDIVIDUAL** items to prepare or store **BOTH** raw and ready to eat foods? ?

| | | |
|-----------------------------|---|----------|
| Yes | 1 | Go to A3 |
| No | 2 | GO TO A6 |
| Do not read out: Don't know | 3 | GO TO A6 |

Evaluating Guidance on E-coli Control of Cross Contamination - Food Businesses SurveyV12

IF YES AT A2

A3 **When using this equipment, how do you stop bacteria from raw food being passed to ready to eat foods??**

DO NOT READ OUT. CODE ALL THAT APPLY (PROBE TO PRECODES)

| | |
|---|----|
| 2 Stage Cleaning (INTERVIEWER – this involves using a detergent/degreaser AND disinfectant separately – please check that both detergent/degreaser AND disinfectant are used before coding) | 1 |
| Dishwasher | 2 |
| Steam steriliser | 3 |
| Sanitiser | 4 |
| Temperature probe wipes | 5 |
| Other method of cleaning | 6 |
| Prepare raw and ready to eat foods at different times of day | 7 |
| Staff training | 8 |
| Written procedures (INTERVIEWER – THIS MAY INCLUDE Hazard Analysis and Critical Control Point (HACCP) plan , Safer Food Better Business (SFBB), Cooksafe or Safe Catering) | 9 |
| Other (specify) | 10 |
| DO NOT READ OUT : NONE OF THESE | 11 |

A4 **QUESTION A4 DELETED**

IF CODE 1 OR 2 OR 3 AT A4

A5 **QA5 DELETED**

Evaluating Guidance on E-coli Control of Cross Contamination - Food Businesses SurveyV12

ASK IF UNAWARE (S4=2,3)

A8 (IF ANSWERS AT A1D OR A3: Other than what you have already told me,) Do you do ANYTHING ELSE at this site to stop bacteria from raw food being passed to ready to eat foods?

INTERVIEWER PLEASE PROBE FOR ANSWERS UNDER EACH HEADING

DO NOT READ OUT. CODE ALL THAT APPLY (PROBE TO HEADINGS)

| SEPARATION MEASURES | | |
|--|----|--|
| Use separate items of equipment or utensils for raw and ready to eat | 1 | |
| Prepare raw and ready-to-eat food at different times of day | 2 | |
| Prepare raw and ready-to-eat food in different areas | 3 | |
| Separate storage areas for raw and ready-to-eat foods | 4 | |
| Store raw foods below ready-to-eat foods in fridges | 5 | |
| Store equipment/utensils for raw and ready to eat food in separate areas | 6 | |
| STAFF MEASURES | | |
| Effective hand washing | 7 | |
| Different staff to handle raw and ready-to-eat foods | 8 | |
| Clothing changed in between preparation and/or handling of raw and ready to eat food | 9 | |
| Staff training | 10 | |
| OTHER MEASURES | | |
| Cleaning schedule | 11 | |
| Written procedures , eg Hazard Analysis and Critical Control Point (HACCP) plan, Safer Food Better Business (SFBB), Cooksafe or Safe Catering | 12 | |
| Other (Specify) | 13 | |
| SINGLE CODE: No other measures | 14 | |
| Don't know | 15 | |

Evaluating Guidance on E-coli Control of Cross Contamination - Food Businesses SurveyV12

IF UNAWARE (S4=2,3) GO TO G1

ASK IF AWARE (S4=1)

A9 (QUESTION MOVED AND REWORDED) May I check, from whom did you FIRST find out about the Food Standard Agency's advice on E.Coli?

DO NOT READ OUT. CODE ALL THAT APPLY

| | |
|--|----|
| Food Standards Agency (FSA) website | 1 |
| Written information sent by the Food Standards Agency (FSA) | 2 |
| Factsheet or leaflet from the [if England Wales] Local Authority/ if Northern Ireland: District Council] | 3 |
| Letter from the [if England Wales] Local Authority/ if Northern Ireland: District Council] | 4 |
| A phone call from a Food Safety Officer | 5 |
| A visit from a Food Safety Officer | 6 |
| From another food business | 7 |
| A trade organisation meeting, newsletter or magazine | 8 |
| In-house training or information | 9 |
| Other (specify) | 10 |
| No-one | 11 |

ASK IF AWARE (S4=1).

A7 I am now going to describe some different documents which the Food Standards Agency has used to provide information to businesses. Please say whether or not you are aware of each. Are you aware of

RANDOMISE LIST

| | YES | NO | Do not read out: Not Sure |
|--|-----|----|---------------------------|
| a. The full FSA guidance document, which is 26 pages long and was updated in December 2014 | 1 | 2 | 3 |
| b. The FSA 4-page factsheet which summarises the Guidance for Caterers | 1 | 2 | 3 |
| c. The FSA guidelines for re-commissioning vacuum-packers | 1 | 2 | 3 |

Evaluating Guidance on E-coli Control of Cross Contamination - Food Businesses SurveyV12

ASK IF ANY=CODE 1 AT A7

A8 And have you read....?

INTERVIEWER: Probe to find out if read in full or just parts of it.

INTERVIEWER NOTE: The respondent may have read the guidance in hard (paper) copy or in electronic format (soft copy).

| | Read it in full | Read parts of it | Not read it | Do not read out: Not sure |
|---|-----------------|------------------|-------------|---------------------------|
| a. The full 26-page FSA guidance document | 1 | 2 | 3 | 4 |
| b. The FSA 4-page factsheet for Caterers | 1 | 2 | 3 | 4 |
| c. The FSA guidelines for re-commissioning vacuum-packers | 1 | 2 | 3 | 4 |

Evaluating Guidance on E-coli Control of Cross Contamination - Food Businesses SurveyV12

B Change in awareness of risks - PROVEN RECALL

SECTION DELETED

Evaluating Guidance on E-coli Control of Cross Contamination - Food Businesses SurveyV12**C Understanding the Guidance****C1 DUMMY VARIABLE: MATERIALS READ IN FULL OR IN PART (A8 (1,2))**

| | | |
|--|----|-------------------|
| The full FSA guidance document | 12 | DISPLAY IF A8=1,2 |
| The FSA 4-page factsheet for Caterers | 13 | DISPLAY IF A8=1,2 |
| The FSA guidelines for re-commissioning vacuum-packers | 14 | DISPLAY IF A8=1,2 |

ASK FOR EACH MENTIONED AT C1

READ OUT MOVED TO IMMEDIATELY BEFORE C2 I would like to ask a few questions about the materials that you have read.

C2 Thinking about [INSERT C1], how easy or difficult was this to understand? Please use a scale of 1-5 where 1 is very difficult and 5 is very easy.

| | | | | | | |
|----------------|---|---|---|-----------|---|----|
| Very Difficult | | | | Very Easy | | DK |
| 1 | 2 | 3 | 4 | 5 | 6 | |

Evaluating Guidance on E-coli Control of Cross Contamination - Food Businesses SurveyV12

ASK FOR EACH C2=1,2

C3 In what way was the [INSERT c1] difficult to understand?

NEW INSTRUCTION INTERVIEWER –WE ARE ONLY INTERESTED IN WHAT WAS DIFFICULT TO UNDERSTAND HERE - WE ASK ABOUT SUGGESTIONS FOR IMPROVEMENTS AT NEXT QUESTION,

CODE ALL THAT APPLY. (DO NOT READ OUT (PROBE TO PRECODES)

| | |
|--|----|
| Language Problems | 1 |
| Some of it was too technical | 2 |
| Needed to be simplified | 3 |
| Some parts were unclear | 4 |
| Too long | 5 |
| Lack of pictures/ charts to help with understanding | 6 |
| It did not apply to my business | 7 |
| Difficult to see how it could be applied in practice | 8 |
| | 9 |
| | 10 |
| | 11 |
| Other (specify) | 12 |
| Don't know/can't remember | 13 |

Evaluating Guidance on E-coli Control of Cross Contamination - Food Businesses SurveyV12

C4 REWORDED QUESTION [ASK IF READ GUIDANCE (ANY @ a8= 1,2) How, if at all, could the Food Standards Agency improve their guidance on E.Coli?

CODE ALL THAT APPLY (DO NOT READ OUT) DO NOT PROMPT.

| | |
|--|----|
| More visuals (e.g. use of pictures/flow charts) | 1 |
| Use of case studies to show how other businesses have implemented guidance | 2 |
| Simplified language | 3 |
| Translation into other languages | 4 |
| Visits from [IF England & Wales ON SAMPLE: Local Authority; IF NI ON SAMPLE: District Council] / Food Safety Officer | 5 |
| Videos | 6 |
| Web-based learning tools | 7 |
| Other (specify) | 8 |
| Don't know | 9 |
| SINGLE CODE ONLY No suggestions for improvement | 10 |

QUESTION C3 DELETED QUESTION C4 DELETED

Evaluating Guidance on E-coli Control of Cross Contamination - Food Businesses SurveyV12

D Changes made at site

ASK IF AWARE (S4= 1)

NEW QUESTION DX Have you made any changes to working practices at this site as a result of the Food Standard Agency's guidance on cross contamination?

Yes – GO TO D1

No – GO TO D3

IF YES AT DX

D1 Which, if any, of the following changes have you made as a result of the Agency's advice?

READ OUT .CATI – blocks of codes rotate.

NEW INSTRUCTION

IF NECESSARY REMIND RESPONDENT HOW WE DEFINE RAW AND READY TO EAT FOODS

Raw food covers red meat, poultry, and raw fruit, vegetables or salad which have not been washed and labelled as ready to eat

Ready to eat food is food that can be eaten without further cooking or processing, e.g. cooked meats, sandwiches, pies, cheese, pre-washed fruit, salad and vegetables

| | YES | NO | DO NOT READ OUT Not applicable at this site | DO NOT READ OUT: DK |
|---|-----|----|--|------------------------|
| Physical separation (premises / equipment/utensils and staff) | | | | |
| Clean areas set aside for handling ready to eat foods | | | | |
| Separate storage or display areas for raw and ready to eat foods | | | | |
| [ask if >1 staff at A1] Use of different staff for raw and ready to eat foods | | | | |
| Separate chopping boards and utensils for raw and ready to eat foods | | | | |
| Packaging materials for ready-to-eat foods moved to a designated clean area | | | | |
| Colour coding of utensils and/or equipment | | | | |
| [ONLY ASK IF A1B=YES] Separate items of complex equipment for raw and ready to eat foods [if necessary; for example vacuum packers, meat slicers] | | | | |
| Time separation | | | | |
| Raw and ready to eat foods prepared at different times of day | | | | |

IF YES AT DX

Evaluating Guidance on E-coli Control of Cross Contamination - Food Businesses SurveyV12

D1A And which, if any, of the following changes have you made as a result of the FSA's advice ?

| | YES | NO | DO NOT READ OUT Not applicable at this site | DO NOT READ OUT: DK |
|--|-----|----|--|------------------------|
| CLEANING AND DISINFECTION | | | | |
| <i>[ONLY ASK IF A1B=YES] New dismantling and disinfection cleaning plan for complex equipment [if necessary; for example vacuum packers, meat slicers]</i> | | | | |
| <i>Equipment used for both raw and ready to eat foods cleaned in dishwasher between uses</i> | | | | |
| <i>Use of British Standard disinfectants</i> | | | | |
| <i>Use of disposable cloths</i> | | | | |
| Personal hygiene and hand washing | | | | |
| <i>New hand washing procedures</i> | | | | |
| <i>Changing of clothes by staff who deal with raw and ready to eat foods</i> | | | | |
| <i>More basins or relocated basins for hand washing</i> | | | | |

IF D1 OR D1A =2 (no)

D2 Why have you not made the following change?

[ASK IN TURN FOR ALL CODED 2 (NO) AT D1 OR D1A. IF >2 CODED 2 (NO) AT D1 OR D1A, CATI TO RANDOMLY PICK TWO]

DO NOT READ OUT – CODE ALL THAT APPLY

| | |
|---|---|
| Already meet the FSA E-Coli cross contamination guidelines | 1 |
| Haven't got round to making change but intend to do so | 2 |
| Don't have the time | 3 |
| Can't afford to | 4 |
| Not sure what needs to be done | 5 |
| Too difficult to do this at this site/ not enough space | 6 |
| Not enough staff | 7 |
| Other (specify) [INTERVIEWER: for example, don't understand, language barriers for some staff] | 8 |
| Don't know | 9 |

Evaluating Guidance on E-coli Control of Cross Contamination - Food Businesses SurveyV12

Ask if DX=2 (No)

D3 **NEW QUESTION** Why have you not made any changes?

DO NOT READ OUT – CODE ALL THAT APPLY

| | |
|---|---|
| Already met the FSA E-Coli cross contamination guidelines | 1 |
| Haven't got round to it, but intend to do so | 2 |
| Don't have the time | 3 |
| Can't afford to | 4 |
| Not sure what needs to be done | 5 |
| Too difficult to do this at this site/ not enough space | 6 |
| Not enough staff | 7 |
| Other (specify) [INTERVIEWER: for example, don't understand, language barriers for some staff] | 8 |
| Don't know | 9 |

E Challenges of implementation

ASK IF AWARE (S4=1) AND NOT BUSINESSES WITH ONLY ONE PERSON WORKING IN IT (A1=NOT CODE 1 OR A1A=2)

E3 (QUESTION HAS MOVED POSITION) Are there any areas of the FSA advice on E.Coli which are particularly difficult to get staff to put into practice?

DO NOT READ OUT - CODE ALL THAT APPLY

| | |
|---|---|
| Separation of areas for raw and ready to eat foods, | 1 |
| Separation of equipment and utensils for raw and ready to eat foods | 2 |
| Hand washing | 3 |
| Cleaning procedures | 4 |
| Changing clothes when handling raw and ready to eat foods | 5 |
| Other (specify) | 6 |
| None | 7 |

Evaluating Guidance on E-coli Control of Cross Contamination - Food Businesses SurveyV12

ASK IF YES TO ONE OR MORE AT D1 OR D1A

E1 Have you experienced any (IF E3= Any (1-6): other) difficulties when making changes to working practices in response to the Food Standard Agency's EColi guidance?

| | |
|-----|---|
| Yes | 1 |
| No | 2 |

ASK IF E1=1

E2 What difficulties have you experienced?

| |
|--|
| <p>WRITE IN</p> <p>- Don't know</p> |
|--|

QUESTION E3 MOVED TO START OF SECTION QUESTION E4 DELETED QUESTION E5 DELETED QUESTION E6 DELETED QUESTION E7 DELETED

F Costs incurred following changes

QUESTION C1 DELETED

G Firmographics

I would like to ask a few questions about the business at this site:

ASK ALL

G1 What is the nature of the business? Is it...

CODE ONE ONLY

| | |
|--------------------------------------|---|
| Single site | 1 |
| One of multiple sites (e.g. a chain) | 2 |
| | 3 |
| | 4 |
| Or something else? | 5 |
| [DO NOT READ OUT] Refused | 6 |
| [DO NOT READ OUT] Don't know | 7 |

ASK ALL

NEW QUESTION G1A What is your first language?

CODE ONE ONLY – PROMPT AS NECESSARY

| | |
|-----------------|---|
| English | 1 |
| Bengali | 2 |
| Hindi | 3 |
| Sylheti | 4 |
| Urdu | 5 |
| Cantonese | 6 |
| Mandarin | 7 |
| Other (specify) | 8 |
| Don't Know | 9 |

Evaluating Guidance on E-coli Control of Cross Contamination - Food Businesses SurveyV12

ASK IF BUSINESS TYPE FROM SAMPLE= MOBILE CATERER, OTHER CATERING PREMISES, RESTAURANT/CAFE/CANTEEN, TAKE AWAY/ SANDWICH SHOP

G2 What is the main type of [for restaurants , takeaways: food served/ If caterer: food prepared] at this site?

CODE ONE ONLY – PROMPT AS NECESSARY

| | |
|--|----|
| English | 1 |
| European (e.g. French, Polish, German, Spanish) | 2 |
| Indian/ Bangladeshi | 3 |
| Chinese | 4 |
| Japanese | 5 |
| Thai | 6 |
| Fusion (mix of Asian cuisines) | 7 |
| A mix of different cuisine, no dominant cuisine served or prepared | 8 |
| Other (specify) | 9 |
| DO NOT READ OUT: Don't Know | 10 |

Evaluating Guidance on E-coli Control of Cross Contamination - Food Businesses SurveyV12

ASK ALL

G3 Do you use a food safety or hazard management system? IF YES: Which system do you use?

INTERVIEWER - we are interested in the name of the food safety or hazard management system used

DO NOT READ OUT CODE ALL THAT APPLY.

| | |
|--|---|
| Cook Safe | 1 |
| Safe Catering | 2 |
| SFBB (Safer Food Better Business) | 3 |
| In-house food safety system | 4 |
| Other system (please specify) | 5 |
| DO NOT READ OUT: Has system, can't remember the name of it | 6 |
| (DO NOT READ OUT) No Food System | 7 |
| (DO NOT READ OUT) Don't know | 8 |

NEW FILTER ASK IF WALES AND ENGLAND ON SAMPLE (EXCLUDE NI)

G4 Are you part of a Primary Authority Partnership or PAP?

| | |
|-----------------------------|---|
| Yes | 1 |
| No | 2 |
| DO NOT READ OUT: Don't know | 3 |

Evaluating Guidance on E-coli Control of Cross Contamination - Food Businesses SurveyV12**H Re-Contact**

ASK ALL

- H1 **Would you be willing for BMG Research to re-contact you to ask further questions about the survey or invite you to take part in future research for the Food Standards Agency on the same subject in the next 6 months?**

| | |
|-----|---|
| Yes | 1 |
| No | 2 |

IF YES AT H1 RECORD DETAILS OF RESPONDENT

| | |
|---------------|---|
| Name: | |
| Job title: | |
| | |
| Phone number: | TAKE BEST NUMBER TO REACH THEM ON IN FUTURE |

Finally I would just like to confirm that this survey has been carried out within the rules of the MRS Code of Conduct. Thank you very much for your help today.

EColi Cross Contamination LA Officer Survey v8 (main stage)

109/02/17

Local Authority Enforcement Officers Questionnaire 2017

S SCREENER

ASK TELEPHONIST

ASK TO SPEAK TO OR LEAD FOOD HYGIENE OFFICER

S1 Good morning/ afternoon, my name is and I'm calling from BMG Research on behalf of the Food Standards Agency. Please can I speak with the LEAD FOOD HYGIENE officer in your Environmental Health department, who is responsible for the co-ordination of food hygiene interventions at food businesses within your area?

LEAD OFFICER NAME ON SAMPLE IS ('RespondentName') OR ASK TO SPEAK TO LEAD FOOD HYGIENE OFFICER.

INTERVIEWER – IF THE LEAD FOOD HYGIENE OFFICER IS NOT AVAILABLE, PLEASE ASK TO SPEAK TO AN AUTHORISED FOOD HYGIENE OFFICER WITHIN THAT TEAM.

A FOOD OFFICER NAME ON SAMPLE IS ('RespondentName2') OR ASK TO SPEAK TO AN AUTHORISED FOOD HYGIENE OFFICER.

REPEAT INTRO WHEN THROUGH TO CORRECT PERSON:

Good morning/ afternoon, my name is and I'm calling from BMG Research, an independent research company. We are conducting a research project for the Food Standards Agency about the knowledge and understanding of the Agency's guidance on 'E. Coli O157: Control of Cross-contamination.'

Can I check, are you responsible for conducting and regularly undertaking inspections of food businesses? We are interested in talking to someone who has recent experience of inspections about their views of the FSA guidance.

INTERVIEWER NOTE: Please ask to speak to the LEAD FOOD HYGIENE Officer. Note that we do not wish to speak to Lead Food Standards Officers. If the LEAD officer is not available, please ask to speak to an authorised food hygiene officer. Note, there will be several authorised officers in each Authority.

ADD IF NECESSARY:

- The interview will take around 10 minutes, depending on your answers. We could either conduct it now, or at a time that's more convenient for you.
- We are conducting a research project for the Food Standards Agency to consider knowledge and understanding of the Agency's guidance on E. coli O157: Control of Cross-contamination. The survey is about food hygiene officers' views of the guidance.

- We would like to get your personal views on the guidance. We appreciate that this may not be the official view of your employer.
- The survey will be carried out according to the Market Research Society's Code of Conduct and the Data Protection Act. IF NECESSARY – you can review the MRS Code of Conduct on the MRS website www.mrs.org.uk
- The Food Standards Agency will not be made aware of your participation in the research and all responses made will remain confidential.

INTERVIEWER: If respondent wishes to confirm validity of survey or get more information about aims and objectives, we can send them an explanatory letter or they can call:

- **MRS: Market Research Society on 0500396999**
- **BMG: Sharon Gowland or Viv Young 0121 333 6006**

STANDARD CALL OUTCOMES PLUS CODES FOR:

Wants reassurances (send reassurance letter)

Refusal (Other specify)

S3 Are you aware of the FSA's guidance on *E.Coli* O157: Control of Cross-contamination?

| | | |
|----------|---|----------|
| Yes | 1 | CONTINUE |
| Not sure | 2 | Ask S4 |
| No | 3 | Ask S4 |

IF CODE 2 or 3 AT S3

S4 As a reminder, the most recent materials consist of a 26-page guidance document, a 4-page factsheet for Caterers and a 1- page guidance on re-commissioning vacuum packing machinery, which were published by the FSA in December 2014. Are you aware of some or all of these documents?

| | | |
|----------|---|-----------------|
| Yes | 1 | CONTINUE |
| Not sure | 2 | THANK AND CLOSE |
| No | 3 | THANK AND CLOSE |

FOR THANK AND CLOSE READ OUT: Unfortunately you do not meet the criteria to take part as we wish to speak to food hygiene officers that are aware of the FSA's guidance on E.Coli cross contamination. Thank you for your time today.

A Background and Communication

ASK ALL

A1 QUESTION A1 DELETED

1

ASK ALL

A2 First of all, may I check, approximately how many food business establishments is your Food Safety team responsible for?

WRITE IN NUMBER:

OR PROMPT WITH RANGES

| | |
|------------------------------|---|
| 500 or fewer | 1 |
| More than 500, up to 1000 | 2 |
| More than 1000, up to 1500 | 3 |
| More than 1,500 up to 2000 | 4 |
| More than 2000, up to 2500 | 5 |
| More than 2,500 up to 3000 | 6 |
| Over 3000 | 7 |
| [DO NOT READ OUT] Don't Know | X |

ASK IF ENGLAND OR WALES ON SAMPLE (EXCLUDE NI)

A3 Does your local authority act as a Primary Authority for any food businesses in your area that handle both raw and ready to eat foods?

| | |
|------------|---|
| Yes | 1 |
| No | 2 |
| Don't know | 3 |

ASK ALL

- A4 The most recent FSA guidance on E-Coli cross contamination consisted of several publications. Are you aware of

READ OUT. CODE ALL THAT APPLY

| | | |
|--|---|----------|
| The full 26-page guidance document | 1 | CONTINUE |
| 4-page factsheet for caterers | 2 | CONTINUE |
| 1-page guidance on re-commissioning vacuum packers | 3 | CONTINUE |
| DO NOT READ OUT: Aware of FSA guidance but cannot recall which publication | 4 | CONTINUE |

ASK ALL

- A5 How were the FSA guidance materials communicated to you?

INTERVIEWER: If emails, letter, website mentioned, check where these came from/which website and code accordingly

DO NOT READ OUT. CODE ALL THAT APPLY

| | |
|--|----|
| Internal team meetings/briefing sessions | 1 |
| Internal emails | 2 |
| Informal chats | 3 |
| Read the guidance myself/ independently | 4 |
| Formal staff training | 5 |
| FSA-funded training for food safety officers | 6 |
| FSA correspondence including emails, letters | 7 |
| FSA website | 8 |
| Professional / trade publication | 9 |
| Other (write in) | 10 |

QUESTION A6 DELETED

ASK IF A4=ANY CODED 1- 3

A7 Can you recall any NEW ADVICE included in the most recent FSA guidance on E.coli cross-contamination?

DO NOT READ OUT. PROBE TO PRECODES. CODE ALL THAT APPLY

| | |
|---|---|
| Separation controls should be appropriate to business activities, what is achievable and the risk posed. | 1 |
| No dual use of vacuum packers, slicers and mincers unless they can be dismantled and fully disinfected between uses | 2 |
| Equipment such as temperature probes, weighing scales and mixers can be dual-use if there is a safe cleaning and disinfection procedure between uses | 3 |
| Utensils (including chopping boards) can only be dual-use if they are sanitised or heat disinfected between uses | 4 |
| No requirement to check dishwasher temperature unless there is a reason to think the dishwasher is not operating correctly | 5 |
| Other (specify) | 6 |
| NOTHING | 7 |
| DON'T KNOW | 8 |

B Dissemination

- B1** Since the publication of the new FSA guidance on E-Coli cross contamination in December 2014, what materials, if any, have you provided to food businesses to inform them about the updated guidance?

READ OUT. CODE ALL THAT APPLY

INTERVIEWER: we want to know **WHAT** material(s) were provided, not **HOW** they were provided

| | |
|--|---|
| (IF A4/1) The full 26 page FSA guidance document (INTERVIEWER – this can be in hard copy or via a link to the FSA website) | 1 |
| (IF A4/2) FSA Factsheet for Caterers which summarises the guidance (INTERVIEWER – this can be in hard copy or via a link to the FSA website) | 2 |
| (IF A4/3) 1-page FSA guidance on re-commissioning vacuum packers (INTERVIEWER – this can be in hard copy or via a link to the FSA website) | 3 |
| [ENGLAND/ WALES: Local authority; NI: District council]produced guidance or factsheet | 4 |
| Any other materials? (specify) | 5 |
| DO NOT READ OUT: None of these (single code) | 6 |

C Views on the Guidance

READ OUT TO ALL: I'd like to explore your views of the FSA's guidance on E.Coli

ASK FOR EACH CODED AT A4 (1-3)

C1 On a scale of 1 to 5 where 5 is very easy and 1 is very difficult, how easy did you personally find the following to understand?

CATI TO LIST THOSE CODED AT A4

| | | | | | |
|--|---|------|---|------|----|
| The full 26-page guidance document | | | | | |
| 4-page factsheet for caterers | | | | | |
| 1-page guidance on re-commissioning vacuum packers | | | | | |
| SCALE - Very difficult | | Easy | | Very | DK |
| 1 | 2 | 3 | 4 | 5 | 6 |

ASK ALL

C2 How might the FSA's guidance be improved to promote understanding among food officers such as yourself?

INTERVIEWER: We are interested in what would help the respondent's understanding. We ask about what they think would help food businesses at a later question

READ OUT. CODE ALL THAT APPLY

| |
|--|
| Include specific guidance for small businesses |
| Include guidance for specific sectors |
| Clearer language / explanation of terminology |
| More practical examples |
| Greater clarity on hierarchy of controls |
| Anything else? (please specify) |
| DO NOT READ OUT No improvements needed to guidance (single code) |
| DO NOT READ OUT: Can't think of any suggestions (single code) |

ASK ALL

- C3 On a scale of 1 to 5 (where 5 is very useful and 1 is not at all useful), how useful are the FSA's guidance materials in helping you tackle the following cross-contamination issues:

| | Not at all useful | | | | | Very useful | DK |
|--|-------------------|---|---|---|---|-------------|----|
| | 1 | 2 | 3 | 4 | 5 | 6 | |
| a Effective Hand washing | 1 | 2 | 3 | 4 | 5 | 6 | |
| b Effective cleaning of equipment and utensils | 1 | 2 | 3 | 4 | 5 | 6 | |
| c Separation of raw and ready to eat foods | 1 | 2 | 3 | 4 | 5 | 6 | |
| d Prevention of the use of complex equipment for both raw and ready to eat foods | 1 | 2 | 3 | 4 | 5 | 6 | |

ASK IF C3 (A-D) =1 OR 2 – REPEAT FOR EACH ISSUE

- C4 Why aren't the guidance materials useful for (insert a-d)

WRITE IN

DO NOT READ OUT: DON'T KNOW

DO NOT READ OUT: NO COMMENT

ASK ALL

- C5 How confident are you about how you apply the FSA guidelines when visiting food businesses? Please answer on a scale of 1 to 5 where 5 is very confident and 1 is not at all confident.

CODE ONE ONLY

| | |
|---|---|
| 1 – Not at all confident | 1 |
| 2 | 2 |
| 3 | 3 |
| 4 | 4 |
| 5 – Very confident | 5 |
| Do not read out: Not yet applied the guidelines when visiting food businesses | 6 |

ASK IF NOT CONFIDENT (C5=1/2)

- C6 What would make you feel more confident?

DO NOT READ OUT CODE ALL THAT APPLY

| | |
|-----------------|---|
| More training | 1 |
| More experience | 2 |
| Clearer advice | 3 |
| Other (specify) | 4 |
| Don't know | 5 |

ASK IF A4=2 (AWARE OF FACTSHEET FOR CATERERS)

- C7 On a scale of 1 to 5 where 5 is very useful and 1 is not at all useful, how useful have you found the 4 page factsheet for caterers in supporting the implementation of the guidance?

| | | | | | | |
|-------------------|---|---|---|-------------|---|----|
| Not at all useful | | | | Very useful | | DK |
| 1 | 2 | 3 | 4 | 5 | 6 | |

ASK IF C7=4, 5

C8 In what way has the factsheet for caterers been useful?

DO NOT READ OUT CODE ALL THAT APPLY

| | |
|---|---|
| Easier to understand than full guidance | 1 |
| Because it is brief | 2 |
| Presents the information clearly | 3 |
| Other (Specify) | 4 |
| Don't know | 5 |

ASK ALL

C9 Are there any other resources or methods which the FSA could provide that you think would help FOOD BUSINESSES better understand the E.Coli guidance?

DO NOT READ OUT. CODE ALL THAT APPLY

| | |
|--|----|
| More visuals (e.g. use of pictures/flow charts) | 1 |
| Use of case studies to show how other businesses have implemented guidance | 2 |
| Simplified language | 3 |
| Translation into other languages | 4 |
| Web-based learning tools | 5 |
| Seminars for businesses | 6 |
| Online information/ training/ videos | 7 |
| Other (Specify) | 8 |
| Don't know | 9 |
| SINGLE CODE ONLY None/no other resources needed | 10 |

D Feedback from Businesses

ASK ALL

D1 To what extent have the food businesses you have visited fully implemented the controls which are applicable to their business, as detailed in the FSA guidance on E-Coli? Would you say....

| | |
|-----------------------------------|---|
| code one onlyAll have implemented | 1 |
| A majority (have implemented) | 2 |
| Around half (have implemented) | 3 |
| A minority (have implemented) | 4 |
| None have implemented | 5 |
| [Do not read out] Don't know | 6 |

ASK ALL

D2 Which aspects of the guidance, if any, have caused problems for food businesses?

WRITE IN AND PROBE FULLY

INTERVIEWER IF NO UNPROMPTED ANSWER, PLEASE PROMPT WITH:

- Anything to do with the separation of equipment, utensils or staff?
- Anything to do with effective cleaning and disinfection?
- Anything to do with personal hygiene and hand washing?

ALLOW NONE

ALLOW DON'T KNOW

ASK ALL

- D3 Which types of business, if any, are more likely to have experienced problems with the implementation of the FSA's Guidance?

DO NOT READ OUT. CODE ALL THAT APPLY

| | |
|---|----|
| Restaurants / cafes/ canteens | 1 |
| Takeaways / sandwich shops | 2 |
| Ethnic food restaurants/ cafes/ takeaways | 3 |
| Outside caterers | 4 |
| Mobile caterers | 5 |
| Ethnic food caterers | 6 |
| Food businesses with high staff turnover | 7 |
| Smaller food businesses | 8 |
| Other (please specify) | 9 |
| NONE | 10 |
| Don't know | 11 |

E Inspections and costs

ASK ALL

- E1 **What changes, if any, have been made to your inspection visits as a result of the FSA guidance? Please think about length of visits, information provided and activities covered during the visit**

DO NOT READ OUT CODE ALL THAT APPLY

| | |
|--|---|
| Longer Visits | 1 |
| Shorter Visits | 2 |
| Proformas, checklists or aide memories used | 3 |
| Level of detail of information provided to Food Businesses | 4 |
| Use of swabbing | 5 |
| Use of sampling | 6 |
| Making sure businesses are aware of cross-contamination guidance | 7 |
| DO NOT READ OUT: No changes made (single code) | 8 |
| Other (write in) | 9 |

ASK ALL EXCEPT D1=1

- E2 **What informal action have you taken where businesses have not implemented the guidance?**

DO NOT READ OUT. CODE ALL THAT APPLY

| | |
|---|---|
| Re-visits for underperforming sites | 1 |
| Written letters advising businesses on compliance | 2 |
| Written report of inspections identifying areas for improvement | 3 |
| No informal action taken | 5 |
| Other (specify) | 6 |
| Don't know | 7 |

QUESTION E3 DELETED

F Re-contact**ASK ALL**

- F1** Finally, it is occasionally necessary to call people back to clarify information; may we please call you back if required?

REASSURE IF NECESSARY: Your details will only be used to call you back regarding this particular study.

| | | |
|-----|---|----------|
| Yes | 1 | Go to F3 |
| No | 2 | |

ASK ALL

- F2** And would you be willing for BMG Research to re-contact you to invite you to take part in future research for the Food Standards Agency on the same subject in the next 6 months? There would be no obligation to take part.

| | | |
|-----|---|----------|
| Yes | 1 | Go to F3 |
| No | 2 | |

- F3** INTERVIEWER record name and job title and best phone number to reach them in future. IF YES AT F2 collect email address

RECORD DETAILS OF RESPONDENT WHO COMPLETED INTERVIEW

| | |
|--|--|
| Name: | |
| Job title: | |
| (if yes at F2) Email address: | |
| Phone number: | |
| Finally I would just like to confirm that this survey has been carried out within the rules of the MRS Code of Conduct. Thank you very much for your help today. | |

THANK RESPONDENT AND CLOSE INTERVIEW

Appendix 4: The Topic Guides



Qualitative Topic Guide Depth Interview [QMS_F23]

FSA FBO site visits (1170)

Introduction and briefing

- **Introductions:**
 - Moderator to introduce themselves and BMG Research
 - Thank them for agreeing to take part in the discussion
- **Overview of the research:** The research is on behalf of the Food Standards Agency regarding the guidance on E-Coli cross contamination and how businesses apply the guidance as well as businesses knowledge and understanding of the guidance. To begin with we will start with a discussion that will last around 45 minutes, depending on your answers and finish off with you showing us around your food preparation area. The visit in total will last one hour.
- **Confidentiality:** All information you provide will be treated confidentially. We will not identify any individuals or disclose the personal details of those who take part including job role and organisation. I am independent: I do not work for the FSA. Your responses will be treated in the strictest confidence as observed by standards determined by the Market Research Society.
 - Views stated are not attributable to individuals and the more open and honest you can be the better.
 - Quotes from the discussions may be used in the research report as a way of bringing the findings to life. However these quotes would not identify any individual. This is in line with the Market Research Society Code of Conduct.
 - There are no right or wrong answers: it's just your views or opinions that count.
- **Recording:** we would like to audio-record the discussion for the purposes of accurately capturing all the information you share with us. The audio will be used for analysis purposes only and will not be shared with anyone outside of BMG research. The content of the discussion is kept confidential. Audios are stored securely and will be securely destroyed once finished with.

Provide opportunity for respondent to ask any questions.

Seek permission to audio-record. Switch microphone on. Once switched on, confirm that the audio-recorder is on for the benefit of the tape.

Warm Up (5 minutes)

Moderator to ask respondent to introduce themselves.

Respondent to introduce themselves:

- First name?
- How long worked for company? How long have you been responsible for food safety at this site?
- How many sites? How many staff?
- Generally speaking, what is the FSA guidance on E-Coli cross contamination? Why was it published?

Awareness of guidance (10 minutes)

- When did you first become aware of the FSA's advice on E-coli cross contamination? And How?
 - Probe for: Internal communications, FSA communication, LA communication, visit from an officer, college
 - Probe for: in person (where necessary)
- Specifically, what FSA guidance documents on E-Coli cross contamination are you aware of?
 - Probe for: Full guidance (26 pages), factsheet, guidance on re-commissioning vacuum packers
- How did you find out about these documents?
 - Probe for: Internal communications, via FSA, training – internal vs external
- Is this your preferred method? Why/why not?
- Is there a better way of communicating the guidance with you? How?
- Are there any other documents on E-Coli cross contamination you are aware of? What documents?
- How can awareness of the guidance be improved amongst businesses
 - Probe for: More communication – what form, from who

Changes to guidance (5 minutes)

- What new advice can you recall from the most recent FSA guidance on E-Coli cross contamination?
 - Probe for: Any changes regarding separation controls? Dual-use of complex equipment? Dual – use of other equipment? Use of dishwashers?
- How was the new advice communicated to you?
- Is this your preferred method? Why/why not?
- Is there a better way of communicating new advice/revisions with you? How?

Views on guidance (10 minutes)

- Are there any particular documents which are difficult to understand? Which ones? Why?
- Are there any areas of the guidance you have difficulty following or understanding? Which areas? Why?
 - Probe for : Length, relevance to business, language issues, complicated terminology, how it can be applied in practice, which cleaning chemicals can be used
- Are there any areas of the guidance that need improving or clarifying to make them clearer for you or other businesses? Which areas? Why?
 - Probe for : Language – simplified and translated, visuals, case studies, videos
- How much personal judgement do you need to apply to the guidance? Why?
- Are there any areas of the guidance you do not agree with? Why?
- Which documents are most useful? Why? Why not?
- Are there other materials that would be useful? What? Why?

Changes to practices (15 minutes)

[Those who have made changes to practices during telephone survey]

You mentioned during the telephone survey that you had made a number of changes to working practices as a result of the FSA's guidance on cross contamination.

- What changes did you make? Why?
- Did you experience any difficulties when making these changes?
- IF YES: What difficulties did you experience? How did you overcome these difficulties?
 - Probe for: difficulties getting staff to follow or understand, cost, space, time
- Is there anything the FSA could have done to help? What? Why?
- Are you planning on making any other changes to working practices? What? When?
- What benefits have you seen from the changes made?
 - Probe for examples: monetary gains, change in staff attitude, change in customer attitude, etc

[Those who have not made changes to practices during telephone survey]

You mentioned during the telephone survey that you have not made any changes to working practices as a result of the FSA's guidance on cross contamination.

- Why is that?
 - Probe for: already meet guidelines, difficulties getting staff to follow or understand, cost, space, time

IF ALREADY MEETING GUIDANCE:

- What working practices do you currently have in place?
 - Probe for: physical separation, time separation, cleaning and disinfection, personal hygiene and hand washing
- Did you experience any difficulties when putting these working practices in place?
- IF YES: What difficulties did you experience? How did you overcome these difficulties?
 - Probe for: difficulties getting staff to follow or understand, cost, space, time
- Is there anything the FSA could have done to help? What? Why?
- Are you planning on making any other changes to working practices? What? When?

IF NOT ALREADY MEETING GUIDANCE:

- What working practices do you currently have in place?
 - Probe for: physical separation, time separation, cleaning and disinfection, personal hygiene and hand washing
- What things prevent you from applying the guidance?
 - Probe for: difficulties getting staff to follow or understand, cost, space, time
- Is there anything the FSA could do to help? What? Why?
- Are you planning on making any other changes to working practices? What? When?

Wrap Up

- Moderator to check for any final closing comments. Is there anything else you would like to mention regarding the FSA and/or the guidance that we haven't already covered?
- Repeat assurances regarding confidentiality

Switch recorder off

Observation (15 minutes) - Optional

Thank respondent for time so far and explain you would now like them to show you where they prepare food. Reassure respondents that this is not an inspection. It is completely optional but we would be interested to see their kitchen or food preparation area to help put the in-depth discussion in perspective.

- Please talk me through your working practices regarding raw and ready to eat foods

Further prompts to use if required and not covered through observation or conversation:

- Where do you prepare your raw food? What food does this consist of? What equipment do you use?
- Where do you prepare your ready to eat food? What food does this consist of? What equipment do you use? MODERATOR TO NOTE IF THERE IS A CLEAN AREA/ROOM
- Can you show me your storage areas – containers, fridges, cupboards?
- What cleaning products do you use? How do you know they are adequate?
- When and how do you clean equipment and surfaces?
- Can you show me your sinks?

Moderator to complete observation sheet

- Arrangements for incentives discussed
- Thank and close



Qualitative Topic Guide: Online Focus Group [QMS_F26]

FSA LA Officers (1170)

Introduction and briefing (5 minutes)

Welcome and thank you very much for taking the time to take part in this online group discussion – your views are very valuable to us! My name is [insert moderator name] and I will be your moderator, supported by [insert co-moderator name] both from BMG Research.

We'll give you a bit of background before we start.

The research is on behalf of the Food Standards Agency and aims to understand the views and experiences of Local Authority officers in using the FSA's guidance on E-Coli cross contamination. The research is being done by BMG Research, an independent research organisation based in Birmingham.

All information you provide will be treated confidentially. We will not identify any individuals or disclose the personal details of those who take part. Your responses will be treated in the strictest confidence as observed by standards determined by the Market Research Society. Your details will only be provided to third parties if we are required to do so by law.

- You do not have to take part in this research. Participation is voluntary and you can withdraw your consent to take part at any time.
- Views stated are not attributable to individuals and the more open and honest you can be the better.
- Quotes from the discussions may be used in the research report as a way of bringing the findings to life. However these quotes would not identify any individual. This is in line with the Market Research Society Code of Conduct.
- There are no right or wrong answers: it's just your views or opinions that count.

Whilst we are primarily interested in your views and opinions, in some instances throughout the discussion we may offer points of clarification if differences in understanding of specific details are causing misunderstanding within the group.

Our discussion today will end no later than [insert time]. There are no right or wrong answers: it's just your views and opinions that count.

Any questions about the research?

Please wait for questions that will be directed to you in this box during the study.

Questions that appear in this box should be answered by typing into the smaller box below. Please type in your responses and hit 'send' or return (no one sees what you write until you do this, but we may know you are writing). Don't worry if your response relates to a slightly earlier question – we'll either clarify with you or work this out – we know that some questions need pondering over and we'd rather you give us your feedback than not at all!

You will also be asked to do some exercises in the whiteboard. Let's practice with the tools! Please write your name by clicking on the A text tool and then type your first name or say Hi or Hello somewhere on the whiteboard.

And then use the pencil tool to draw a circle round your name or what you have typed.

Finally, click on the tick and put a tick next to your name.

Great work!

You will see written responses of the other participants. If you see a response that sparks a thought of your own please feel free to comment. We do not expect everyone to agree. It is important to know your reasons for agreeing or disagreeing.

Do not worry about spelling or grammar and finally, I hope you enjoy taking part in the Group! Ok – let's begin! Now for your first question...

Warm Up (5 minutes)

- Could you start off by confirming the Local Authority you work for?
- How long have you worked as an authorised food officer?
- Generally speaking, what is the FSA guidance on E-Coli cross contamination? Why was it published?

Awareness of guidance (20 minutes)

- What FSA guidance documents on E-Coli cross contamination are you aware of?
 - Probe for: full guidance (26 pages), factsheet, guidance on re-commissioning vacuum packers
- How did you find out about these documents?
 - Probe for: Internal communications, via FSA, training – internal vs external
- Is this your preferred method? Why/why not?
- Is there a better way of communicating the guidance with you? How?
- Are there any other documents on E-Coli cross contamination you are aware of? What documents?
- Thinking back to when you first became aware of the FSA guidance on E-Coli, how long did it take for you to become familiar with the guidance?
 - Probe for: Hours, days, number of visits
- How can awareness of the guidance be improved amongst...
 - LA Officers
 - Food businesses

Changes to guidance (25 minutes)

- What new advice can you recall from the most recent FSA guidance on E-Coli cross contamination?
 - Probe for: Any changes regarding separation controls? Dual-use of complex equipment? Dual – use of other equipment? Use of dishwashers?
- How was the new advice communicated to you?
- Is this your preferred method? Why/why not?
- Is there a better way of communicating new advice/revisions with you? How?
- How long did it take for you to become familiar with the revised guidance? How long before you put the new advice in place?
 - Probe for: Hours, days, number of visits
- Have revisions in the guidance had any cost implications on the LA?
 - Probe for: Additional training, re-printing of documents, additional communication with food businesses, additional visits, etc
- Did you update food businesses about the new guidance? How?
 - Probe for: Any particular materials supplied?
 - Probe for: WHERE RELEVANT - Balance between posting materials and inspection visits? Can you give a rough percentage?
- Have you made any changes to your practices/inspections following the FSA guidance? What?
 - Probe for: Length of visit? Activities undertaken? Information provided?
- What actions do you take where businesses have not implemented the guidance?
 - Probe for: formal vs informal, re-visits, written letters, written reports highlighting areas for improvement

Views on guidance (30 minutes)

- How confident are you in applying the guidance when visiting food businesses? Why?
 - Probe for: How about in relation to complex equipment – why?
- What could improve confidence? Why?
- How much personal judgement do you need to apply when visiting businesses? Why?
- Ease of balancing enforcement of guidance with specific business circumstances? Why?
 - Probe for : ability to demonstrate adequate separation by time, probes, vacuum packers
- Are there any areas of the guidance you do not agree with? Why?
- Are there any areas of the guidance that need improving or clarifying to make them clearer for you or other Officers? Which areas? Why?
 - Probe for : Guidance for specific sectors or small businesses, terminology, practical examples, clarity on hierarchy of controls, chemicals used for cleaning
 - Probe for: Format – any issues?
- What is the hierarchy of controls? Is this easy to follow? Why?

- Is the use of cleaning chemicals used an issue? Why?
 - Probe for : How do address this?
- Are there any areas of the guidance you have difficulty getting food businesses to follow or understand? Which areas? Why?
- Is it certain businesses? Which ones? Why do you think it is these?
- How could the FSA make the guidance more user friendly for businesses?
 - Probe for : Guidance for specific sectors or small businesses, terminology, practical examples, chemicals used for cleaning
- Which documents are most useful? Why? Why not?
- Are there other materials that would be useful? What? Why?
- What other information have you come across in your course of work that would be good examples of how to communicate?

Wrap Up (5 minutes)

- Moderator to check for any final closing comments. Is there anything else you would like to mention regarding the FSA and/or the guidance that we haven't already covered?
- Repeat assurances regarding confidentiality
- Thank and close

Appendix 5: Business site visit case studies

The following case studies summarise the findings from food businesses who took part in the research. Specifically, these case studies set out the businesses awareness and understanding of the guidance, as well as how they apply the guidance in practice.

5.1 Case Study 1 – Takeaway (Midlands)

5.1.1 Business Profile

The participant has worked as manager at the take away for seven years. The participant is a food handler and is responsible for food safety at the site. The business operates from one site and employs two staff members consisting of the business manager and their partner. The business has a food hygiene rating of 3 which was awarded in 2015.

5.1.2 Awareness of the guidance

The participant first became aware of the FSA's advice on *E. coli* cross contamination 5 years ago when they invited an Officer to their business to provide them with advice and guidance on their food safety practices. This visit was not prompted by the LA or a programmed inspection. It was an advisory visit prompted by the participant calling them. The Officer went through the full guidance document with the business in person and advised them on how to apply it in practice. The full guidance is the only document the participant is aware of.

The participant prefers face-to-face interaction compared to other means of communication and considers it to be more useful to speak to someone in person and see the guidance demonstrated in practice

“One on one and face-to-face contact is the best option you get to understand everything properly. You can show them what you want help on and they can show you how to do it, especially when you are not any good at explaining things”

5.1.3 Awareness of changes to guidance

The participant is not aware of any changes or new advice detailed in the most recent FSA guidance on *E. coli* cross contamination. As it stands the participant adopts separation controls by using a separate fridge and work space for raw vegetables and raw meats.

“I have not heard of anything or no differences or changes, I've not had an inspection in three years. It's just the same as whatever it was from the beginning”.

They feel that the FSA should make an active effort to communicate changes to the guidance with businesses and recommended this could be achieved by sending paper work to all businesses outlining the key changes.

“Businesses should be visited every year. They should make sure they update everyone on changes to the documents, even if the changes come as paper work that you can stick in to your folder, it would be better than nothing”.

5.1.4 Views on guidance

The participant views the full guidance document as straight forward to comprehend and apply in practice.

The length of the document is perceived as appropriate as it covers each subject comprehensively and is regarded as useful. The information on cleaning equipment is clear-cut to follow and the guidance is generally seen as being relevant to the nature of the services the business provides. The terminology is perceived as user-friendly, though businesses whose second language is English may struggle to follow more complicated words in the guidance. Therefore, it is advised FSA provides the guidance in different languages to suit the needs of such businesses

“Language is straightforward, well for someone who reads and talks English. If it was for a person from another country like all these takeaways are Pakistanis or Turkish people, for them to read it it is complicated. The language and the big complicated words they use. It should be provided in their language”.

The guidance is perceived as simple to apply in practice as it goes through the different procedures using a step by step approach which are accompanied by visual illustrations. However, the participant outlines they apply around 50% of their own personal judgment as they feel most of the guidance is common sense to follow.

The participant does not suggest any improvements to the document however case study examples are considered useful in terms of contextualising the guidance.

5.1.5 Implementation of guidance

As a result of the FSA’s guidance on cross contamination the participant has implemented some key changes to their working practices. Previously they used separate areas for raw vegetables and a separate area for all meats. Now they have a separate area for raw vegetables and two separate areas for meats – one area for raw meats and one area for the meat once it has been cooked. They also have a separate washing area and different equipment for each food item.

They made these changes to prevent cross-contamination and ensure they are following the guidance appropriately. They faced a slight challenge in finding adequate space to accommodate the separation control changes they put in place which they overcame by purchasing a table to use as workspace. Apart from this they did not highlight facing any major challenges.

5.1.6 Observations

5.1.6.1 Preparation of raw food

The participant prepares raw food (which is primarily meat and fish) in a work area that is based in a separate room next to the sink. Raw vegetables are prepared in a different work space, in a different room. They have a sign displayed on the wall to indicate the area where raw meat should be prepared.

A green chopping board is used to prepare raw vegetables and a blue chopping is used for the preparation of raw meat.

Knives are hung on a wall, pots and pans are stored under the sink unit.

5.1.6.2 Preparation of ready to eat food

Participant said they do not prepare ready to eat food as all food needs to be prepared or cooked. However, they do have a sticker stating 'ready to eat foods' on the fridge in which salads, buns and naan breads are stored. Participant suggests that they have labelled the fridge with the sticker as they were instructed by the Officer to do so.

"We stuck that sticker on because they gave it to us".

5.1.6.3 Use of cleaning products

The participant uses disinfectant, fairy, cillit bang, dettol spray and bleach which are kept in a storage room. They have always used these products and the Officer confirmed that these cleaning products are adequate during an inspection visit.

Surfaces are cleaned using hot water, fairy and disinfectant.

5.1.6.4 Storage of food

Bulk meat items are stored in a large chest freezer. Items used on an everyday basis such as sausages and burgers are stored in a separate freezer for convenience.

"It saves us from opening and closing the chest freezer, we can quickly take the food out of the everyday use freezer".

They have two fridges – a small fridge which they use for raw vegetables and a large fridge which they use for meat. Salads, buns and naan breads are stored in the lower compartment of the large fridge whilst meats are stored in the higher compartment.

5.1.6.5 Any other observations

Kitchen itself is quite small although there is another room which is used for the storage of food and preparation of raw vegetables.

The work areas and both rooms are clean.

There are two sinks which are used to wash equipment straight after use. There is a separate basin for hand washing.

5.2 Case Study 2 – Takeaway (Midlands)

5.2.1 Business Profile

The participant is the owner of a take away and has worked in the kitchen and been responsible for food safety in the business for 5 years. The business operates from one site and employs two family members who occasionally support the owner during busy periods. This business has a food hygiene rating of 2 which was awarded in 2015.

5.2.2 Awareness of the guidance

The participant is aware of the full guidance document on *E. coli* O157 Control of Cross Contamination and also mentioned other documents that provide information regarding allergies, but was not aware of the factsheet. However, the participant believes that much of the information in the guidance is common sense.

The participant's partner also works in a different restaurant and advised us that they are also familiar with the business food safety practices and procedures that are required to ensure food is safe. These practices are also applied in the takeaway.

"We learn a lot at work but it's mainly from the booklet as well, we make ourselves knowledgeable. It's common sense sometimes... don't use the same spoon for your raw meat and your cooked meats."

5.2.3 Awareness of changes to guidance

The participant is not aware of any changes to the guidance and feels that the FSA should be responsible of communicating and updating them when they occur.

They do not feel supported, especially when they are struggling to understand the guidance documents. Consequently, they do their own research using the internet for more information to inform their working practices.

"Who can you go to...there's no one to go to... you have to use your own knowledge and look on the internet which emphasizes more information about it."

In terms of their current practices, the participant advised us they are aware of, and adopt, time separation procedures when preparing raw meats and cooked meats.

5.2.4 Views on guidance

The participant believes that the full guidance document is too long and includes too much information. This is not convenient for small businesses due to limited resources and time. Therefore, instead of a full guidance document, the participant suggests that the FSA should present information on laminated sheets that are easier to digest and follow.

The use of language in the guide is also perceived as complicated and should be simplified and made more relevant to smaller businesses as a lot of the information is perceived to be written for larger organisations. Additionally the participant remarks that the text used in the guidance is too small in size and is difficult to read especially for people who have a learning difficulty, such as dyslexia. Therefore, the participant has produced a simplified version of the guidance that they follow, is based on their understanding of the full guidance document, and covers areas such as separation controls, using a separate area to serve each food item, time separation and meat preparation guidelines.

Although not specifically related to cross-contamination, the participant mentioned that they find the daily task and temperature sheets they are advised to complete as part of their food safety management system onerous. They are perceived as lengthy and inconvenient for small businesses as resources are scarce. Furthermore, the guidance around not washing meat is also doubted by the participant as they question the cleanliness of the source.

“In small businesses you don’t have a supervisor to tell you do this and that, I am on my own so if I didn’t have the support of my family to help me out I would never get the daily task and temperature sheets done.”

“You get meat fresh from butcher and you don’t know where it has been or comes from so it should be washed.”

5.2.5 Implementation of guidance

The participant adopts time separation procedures whereby raw foods are prepared when the shop is closing and ready to eat meats in the morning. Closed containers are used to store all foods. Meats are no longer washed and work surfaces are disinfected following the advice given. These procedures have allowed for more structure and organisation in practice. There is also more assurance surrounding the control of cross contamination.

“There’s no worry in thinking there’s a bit of meat splashed over there. It’s more structure. In the morning when you come in you haven’t got to cut the chicken strips up it’s all prepared, it makes your day easier.”

The participant did not face any difficulty when implementing these changes in practice; however more support from the FSA would be appreciated.

“When a new business opens, an Officer should come out and go through the booklet and explain it to you... they just give you the booklet and say ‘there you go bye bye’.”

5.2.6 Observations

The participant opted out of the observation element.

5.3 Case Study 3 – Restaurant/Cafe (South)

5.3.1 Business Profile

The participant is the owner of the restaurant/cafe, and has worked in the kitchen and been responsible for food and safety in the business for 5 years. The business operates from one site and employs four full time staff members. This business has a food hygiene rating of 5 which was awarded in 2015.

5.3.2 Awareness of the guidance

The participant first became aware of *E. coli* O157 Control of Cross Contamination during college whilst studying for a food hygiene diploma.

“I am aware from college several years ago, I did the diploma in food hygiene.”

More recently the participant’s awareness of the FSA’s advice around this topic stems from experience gained from previously working in various restaurants and a visit from an Environmental Health Officer (EHO) that took place 2 years ago.

“I’ve worked in various food practices and had visits from an Environmental Health Officer...so I am obviously keeping abreast of any developments.”

The participant is aware of the full guidance document and keeps abreast of changes based on information that is gained from scheduled visits from EHO. The participant then went on to show the documents he has and refers to which contained a lot of information and appeared to be based on the Safer Food Better Business pack. Face-to-face interaction is the preferred method of communication of the guidance in comparison to other methods.

In order to raise awareness of the guidance amongst businesses, the participant suggests that the FSA should ensure that Environmental Health Officers undertake more regular visits to businesses.

5.3.3 Awareness of changes to guidance

The participant is not aware of any changes or new advice from the FSA since the last visit from an Environmental Health Officer that took place 2 years ago.

The participant suggests that if there is new legislation or guidelines it should be communicated by the FSA via email, letter or a personal visit. A personal visit would be most preferred as it gives them the opportunity to have a discussion and raise any concerns

“If there’s a new legislation it should come through the local Officers through email, letter or word of mouth... personal visit would be better.”

They have continued to use the original full guidance document and therefore have not made any changes.

5.3.4 Views on guidance

The participant views the full guidance document positively and no improvements are suggested. Most of the guidance is perceived as common sense.

“A lot of it you think is possibly common sense.”

The participant uses a lot of personal judgment when putting the guidance in to practice; this is due to extensive experience gathered working in the food industry.

The participant finds it relatively easy to go through the safety points in the guidance documents as it explains why they need to be followed and they can identify whether they are following them correctly.

They use the document to brief new employees to guide them on procedures they should follow. However due to the length of the document, they tend to cover it section by section.

Thus in terms of improving the guidance, they would prefer if information was provided in smaller parts as opposed to the full guidance document. Then it would be easier and less time consuming for businesses that are too busy to read, interpret and put in to practice.

“It would be better if the information is given in small chunks rather than giving businesses a long book. Also it is difficult as people tend to do it naturally rather than read something from the FSA.”

5.3.5 Implementation of guidance

The participant has not made any changes to working practices following the FSA's advice on *E. coli* (which is the most recent 2014 guidance) or the Officer visit. Although he is very knowledgeable, based on the number of years he has been in the food business and the various courses he has been on, he is unsure if they should be doing anything else and whether they are meeting all of the guidelines.

They use two separate chopping boards which are colour coded (yellow is cooked meat and red is raw meat). They are washed in warm soapy water and dried separately, ready for use again. However the same work area is used to prepare both the raw meat and the cooked meat. Salads and meats are stored in separate fridges

They use antibacterial sanitizer to clear work surfaces. These are purchased from a catering company, so participant assumes they are BS approved. The participant ensures that all staff follow appropriate hand washing procedures. They use a dishwasher which is cleaned every day; they do not follow any guidance regarding this.

5.3.6 Observations

5.3.6.1 Preparation of food

Participant prepares raw meats, poultry, vegetables and salads in the same area although separate chopping boards are used. Although they use the same knives if these are used for anything raw they are put to be washed immediately after they are used.

Cooked meat, which he has cooked the night before, is prepared in the morning whilst raw food is prepared in the evenings. These include ham, chicken, sausages and bacon. Salad which he has to wash is prepared during the day.

The participant stated that they do not handle or prepare ready to eat foods, as the raw meat is cooked the night before however during the visit there was a loaf of bread situated on the work surface.

Knives, a food processor and chopper are used to prepare these foods. However it is rare that they use such equipment on raw meat as they buy these pre-cut. If equipment is used they are washed straight away in warm soapy water or in the dishwasher.

5.3.6.2 Use of cleaning products

Cleaning products are stored in a separate storage room.

Antibacterial sanitizer and a general cleaner are used for cleaning. These are purchased from a catering company, so the participant assumes that they are BS approved. The participant uses sanitizer to clean preparation areas, and only these areas are used to prepare food.

Although the dish washer is cleaned on a daily basis, information and guidance provided in the guidance document regarding dishwasher cleaning procedures is not strictly followed.

5.3.6.3 Storage of food

Salad, raw food and ready to eat food are stored in a large fridge on separate shelves and in separate sealed boxes/containers, although it was not stated whether RTE food is stored above raw foods.

“The food is stored on separate shelves and is covered ...they are stored in separate boxes.”

5.3.6.4 Any other observations

Kitchen is large in size and has 2 sinks. It is immaculately clean.

There are posters above a separate sink outlining hand washing procedures.

Participant ensures that all staff members wash their hands before entering the kitchen area.

5.4 Case Study 4 – Caring Premises (North)

5.4.1 Business Profile

The participant has worked as the cook at the caring premises for 3.5 years and has been responsible for food safety at that site since undertaking her cooking course which she started as soon as she started at the business. The business operates from one site and employs around 20 staff in total, but only 2 of these are kitchen staff including another cook that covers on the participant's days off. The business has a food hygiene rating of 3 which was awarded in 2016.

As well as interviewing the cook at the site we also spoke to the assistant manager who has worked at the caring premises for 10 years and has responsibility as manager for food safety, although they do not directly deal with food.

5.4.2 Awareness of the guidance

The participant understands that the FSA's guidance on *E. coli* O157 Control of Cross Contamination was first published to ensure the safety of the residents and to ensure food is prepared safely.

The participant is unsure when she first became aware of the FSA's advice on *E. coli* cross contamination. She knew about *E. coli* prior to starting at the business but this may not necessarily have been the FSA's advice on *E. coli*. She also learnt about cross contamination in her cooking course which took two years to complete, and which she passed in 2016.

The participant has never spoken to the FSA but she did have a visit from the Environmental Health in 2016 to undertake an inspection. The participant is not aware of any information or documents specifically from the FSA regarding *E. coli* and was confused by the reference to *E. coli* O157.

The participant does not have a computer or email and therefore the best way for the FSA to communicate with her would be either face-to-face or phone. Alternatively they could email information to the owner to pass on.

To increase awareness amongst other similar businesses the participant thinks the FSA should produce a leaflet, document or booklet just about *E. coli* with everything broken down about it that they could send to similar businesses to keep on file. If she was sent a document, even if it was 26 pages long, she would read it.

"The length of document is not an issue because if somebody sent me the document I would read it because I am in the kitchen and if anybody is ill it is my responsibility."

The kitchen had a Safer Food Better Business pack previous to the Environmental Health inspection but during the inspection it was highlighted that it was an out of date version and that they would need to apply for a revised version. The participant was not aware prior to the inspection that the pack was out of date or where to get the revised version. Previously Safer Food Better Business packs would be re-issued when out of date but they do not do this anymore.

"Everything I need on food safety is in that book but there is nothing in there on E. coli. They've got contamination in there but there is nothing in there that references E. coli."

The participant also mentioned a document specifically about *E. coli* that she could put in her Safer Food Better Business pack or a leaflet that she could pin on her notice board. There is a section on the Safer Food Better Business pack that refers to cross contamination but not specifically *E. coli*.

The Officer who visited was very helpful and gave the participant her card and said if she had any queries to contact her. Without this the participant would not know who to contact or how to contact them if she did have any issues.

Assistant Manager's comments

The Assistant Manager understands that the FSA's guidance on *E. coli* was first published to ensure they work safely and are following the right rules.

She is aware of the FSA's advice on *E. coli* and first became aware of this from an email from the FSA. The manager gets all the emails and prints out the information for the team. This form of communication from the FSA works well and she does not feel more face-to-face contact is required. They also receive visits every year from Environmental Health.

Although she is aware of the full guidance they have their own policy which they have developed for staff to follow. They have developed this policy separate to what the FSA have provided, as it is a private business and they have all their own policies, although they have used information the FSA provided to develop this.

In terms of increasing awareness amongst businesses she feels this does not need increasing and that in recent years awareness has increased a lot amongst businesses.

5.4.3 Awareness of changes to guidance

The participant is not aware of any changes or new advice from the FSA guidance on *E. coli* cross contamination. The participant does not recall anything regarding dual use of equipment or the use of dishwashers from the visit.

Any changes to the guidance would need to be communicated to the owner to be passed on to the participant or face-to-face.

"It would be good if they came out and made you aware of the changes and then if you had any queries you could ask."

Assistant Manager's comments

Although she recalls the guidance changing in 2013/14 she cannot recall the specific changes in the guidance. As a result of these changes to the guidance they amended their policy. The new guidance was communicated via email.

5.4.4 Views on guidance

Although the participant could not say for sure that she was aware of the particular FSA documents, in general she did not have any issues with separation.

As previously mentioned a leaflet specifically on *E. coli* that she could pin on the notice board would be useful.

The participant would probably not find case studies of other businesses useful even if they were similar, as she realises they would probably be bigger businesses. If the FSA were to provide case studies it would need to match them and their surroundings and equipment.

The participant felt the guidance should allow the user to adapt it to their own situation and she would be happy to make a judgement on what they should do based on their surroundings and what they are able to put in place.

“You need to be able to accommodate your surroundings so it is no good them saying you need to do this as you would have to do it to your surroundings. We are not a big business. I would be happy to make a judgement based on options as long as it is within the guidelines.”

Assistant Manager’s comments

The Assistant Manager feels that although the FSA’s guidance is good and easy enough to understand, the full guidance is too intense for small businesses and that there is a lot of information to digest.

“The guidance is too intense. There is a lot of paperwork to work through so we put it into our own policy where we have 6 or 7 different topics not just cross contamination.”

The Assistant Manager feels the benefits of the guidance are they know what they should do, what they should be aware of, and can identify areas for improvement.

5.4.5 Implementation of guidance

The business has now put in to place the actions required following the Environmental Health visit in 2016 which were not connected with *E. coli* and included putting a poster on the wall. The changes made following the visit included changing the temperature probes for meat and fridge/freezer, installing either a fan for ventilation or putting a fly screen on the window. The participant cannot remember any major issues following the visit and there were no changes required in connection with cross contamination as they were already meeting the guidelines.

“As far as I’m aware I do comply with everything I’m supposed to do. If the Environmental Health came in now I wouldn’t change the way I was doing things because when she was last here she was happy with how I prepared everything.”

They already have physical separation with a separate fridge for raw food with meats at the bottom and another fridge for RTE foods, such as bread, cooked meats and salad. This is something the participant implemented when she got to the business as she has always done it that way. She also made further changes to the kitchen following the National Vocational Qualification (NVQ) course she went on.

“I changed it when I came because of the way I am. I have a bit of an obsessive-compulsive disorder (OCD). When I started doing the cooking NVQ I then changed things for the better of the kitchen.”

“The NVQ has been fantastic. I didn’t want to do it originally. It has taken two years to do. It has helped me so much in here because you cannot do in here what you do at home, you have to think about the residents.”

There are no issues with space and implementing the guidance.

The main cleaning product used in the kitchen is Milton including Milton tablets for cleaning the floor. The participant also has a kitchen spray for wiping down the tiles. They are not allowed any chemicals in the kitchen. The participant would clean everything prior to finishing and this would be documented so the person who prepares the tea knows what has been cleaned. The participant knows that Milton is acceptable as Environmental Health said it was, but she was not aware of any specific standards that it had to meet.

The participant always keeps a good stock of Milton but if she couldn't get Milton for whatever reason she would not know how to pick another cleaning product. She would need to enquire and get advice.

The participant feels it is easy for them to follow the guidance as there are only 2 of them in the kitchen and they communicate really well and know exactly what each other has done.

There have been no cost implications in putting the guidance into practice. The participant sees the main benefit of following the guidance as the safety of her residents.

"If I don't follow it and anybody gets ill it would be my neck on the line."

The participant says they are not planning on making any further changes to working practices at the moment.

Assistant Manager's comments

They have had no difficulties putting the guidance into practice or following it. She is aware now what standard the cleaning products have to be. This was something they changed following the Environmental Health visit as the surface spray they were using, although it was anti-bacterial, did not state this on the bottle.

"We have a cleaner who checks all the Control of Substances Hazardous to Health (COSHH) cupboard stuff. We have a list of what we can and cannot use in our policy so we only get the stuff we can use. For kitchen we use Milton which we changed following the Environmental Health visit. Previous to that we used a kitchen cleaner but we were told it had to say anti-bacterial on the bottle which I wasn't aware of. We used to get Milton tablets as well separately, but the Officer said it would be better if we just used one product."

There have been no cost implications in putting the guidance in to place. There are no plans to make any changes to current working practices.

5.4.6 Observations

5.4.6.1 Preparation of raw food

The participant prepares raw food (which is primarily meat and vegetables) on a work surface in the middle of the kitchen.

Although they do have all the separate colour coded chopping boards, the red one is broken and the participant doesn't like to use them. The participant has a glass chopping board which she likes to use for everything, but she cleans it with Milton between uses, which the Environmental Health confirmed was acceptable when they visited.

5.4.6.2 Preparation of ready to eat food

The participant said the only ready to eat food they have is the sandwich meat which she does not handle as everything is cooked fresh and the owner, who also has her food safety NVQ, handles the RTE foods when preparing sandwiches at tea time. Participant said if she did have to prepare a sandwich she would use a separate area of the work surface to prepare it and would clean the surface and wear gloves. There is no labelling of a separate area for ready to eat only. The participant did however, handle tinned goods such as baked beans, rice pudding and frozen cheesecake during the visit.

5.4.6.3 Use of cleaning products

The participant uses Milton which she knows is acceptable as the Environmental Health Officer confirmed it was ok although participant did not mention BSEN standard. Surfaces are cleaned using Milton between uses and at the end of her shift prior to the other member of staff coming in to prepare the tea. This is documented. Although they do have a dishwasher in the kitchen it is the participant's choice whether it is used or not.

5.4.6.4 Storage of food

Everything is stored separately. They have three fridges and raw meat is stored at the bottom of one of the fridges which is something the participant changed when she got there as it is something she has always done.

5.4.6.5 Any other observations

There are no space issues in the kitchen. The kitchen is very clean and tidy. There is plenty of storage room. It is a small kitchen team so procedures are easier to put in place.

There are two sinks, one of which is used for hand washing with a poster above it with hand washing procedures.

There is also another poster displayed on the notice board which was provided to the participant by the Environmental Health Officer, although this was not in relation to E-Coli.

All procedure documents and time logs, etc are signed and stored in a folder in the kitchen.

5.5 Case Study 5 – Restaurant/Cafe (South)

5.5.1 Business Profile

The participant is the owner of the restaurant/cafe, and has worked in the kitchen and been responsible for food and safety in the business for 5 years along with her husband. The business operates from one site and has just the two employees (herself and her husband). The business has a food hygiene rating of 5 which was awarded in 2015.

5.5.2 Awareness of the guidance

The participant believes the FSA's guidance on *E. coli* O157 Control of Cross Contamination was first published to stop the bacteria spreading.

The participant first became aware of *E. coli* cross contamination about 3 years ago when they had a visit from an Officer. Prior to this the participant was unaware of the FSA guidelines and whether they were following the guidelines. The participant also mentioned undertaking a course about 4 years ago on food safety which she has undertaken refresher courses for as well, but this did not specifically cover *E. coli*.

The participant is aware of the full guidance document, factsheet and the guidance on re-commissioning vacuum packers and she keeps all documents in the kitchen by the vacuum packer. The participant first became aware of the documents via the Officer and specifically said the most helpful document is the one that refers to what has been done to the product and how long you can keep it. The Officer also referred the participant to the FSA website where she downloaded more documents.

If the participant didn't receive the visit from the Officer she would not be aware of *E. coli* cross contamination so the face-to-face visits are important for awareness.

5.5.3 Awareness of changes to guidance

The participant is not aware if the guidance she has or was given by the Officer is the updated guidance or the original guidance.

The Officer did refer the participant to the FSA website where she downloaded the documents and regularly checks for changes to the documents every few months but it is not always easy to see what the changes are.

"If there is new guidelines it would be nice to know it straight away rather than wait for a visit from an Officer. The Officer can email me to let us know. As long as we know it doesn't really matter which method."

5.5.4 Views on guidance

Although the participant, whose first language is not English, views the full guidance document as straightforward and does not have any difficulties following or understanding it she does feel that the language and terminology used could be simplified to help others better understand the guidance.

The participant would find it more useful if the guidance covered the products they use, such as cured meat, and showed that it can be repackaged without risk of *E. coli*. More information on this in general would be useful.

“This is something I had to show the Officer when they should know.”

The participant also mentioned that an A4 sheet on what you should do that could be displayed on the wall would be useful as a quick guidance when they have not got time to read the full guidance. The participant suggested it could be one A4 sheet per guidance area if it cannot all fit on one A4 page.

“An A4 sheet that if you follow you would be ok would be useful. Then you have the rest of the information that you can read through but this one would be visual. You can stick it up. It would be easier to follow this. It’s ok for us as it’s just us two but if you have staff, especially as they change all the time, it would be good for them as it is in front of them. It would help with the training.”

5.5.5 Implementation of guidance

Although the participant does use complex equipment in the form of a vacuum packer and meat slicer they are only used for ready to eat foods.

During the Officer’s visit they discussed the vacuum packer/meat slicer and what it is used for. The Officer confirmed it is being used correctly in accordance with the guidelines but prior to this the participant was unaware whether they were following the guidelines. The Officer also confirmed that the participant is meeting the *E. coli* guidelines and that no changes were required.

They do not have a separate clean area or room for ready to eat food as they do not have the space, but they follow the guidelines with time separation with raw meat being prepared in the morning before the restaurant opens and then all surfaces and equipment cleaned. This is something the participant has always done rather than based on the FSA guidelines.

The participant has made some changes to working practices recently which is in connection with keeping better records. This is largely in connection with the date of things rather than *E. coli* cross contamination. They already ensured they kept the raw meat separate from the cured meat and any other RTE foods. The participant feels the benefit of making this change is that they are more confident in their working.

The participant cleans equipment between uses with warm soapy water and an antibacterial spray which is bought from a wholesaler and is British Standard. The participant also has a disinfectant which they use at the end of shift as this has to be left for 15 minutes. The participant has always used these cleaning products and the Officer confirmed the products she uses are acceptable.

The participant found it difficult to ensure all employees were following the new working practices. When they were first introduced there were more employees but now it is just the two of them it is easier to ensure any working practices are followed.

The participant is not planning on making any other changes to working practices.

“The Officers have been very helpful from when we opened. I know if I had any queries I can just call them.”

5.5.6 Observations

5.5.6.1 Preparation of food

The participant prepares raw meats, mostly mince, and raw vegetables, such as, onions, tomatoes and lettuce. The preparation of the raw food is undertaken in the morning before the restaurant is opened. Different colour chopping boards are used and all surfaces and equipment are cleaned between uses.

The ready to eat food that is mainly used is cured meat, such as, pepperoni and salami, which they use a vacuum packer and meat slicer for. These are cleaned with warm soapy water between uses and are not used for any raw foods. The salads are bought in pre-packed bags ready to use.

The kitchen is too small to have a separate dedicated area for ready to eat food.

5.5.6.2 Use of cleaning products

All equipment and surfaces are cleaned between uses with warm soapy water and an antibacterial spray which the Officer that visited has confirmed are acceptable.

All cleaning products are purchased from a wholesale catering supplier so the participant assumes they are BSEN standard.

5.5.6.3 Storage of food

Due to the size of the kitchen they only have one fridge but raw food and ready to eat foods are always stored in separate containers with RTE stored above any raw foods.

5.5.6.4 Any other observations

The kitchen is clean and tidy. There are posters on the walls including one above the sink regarding hand washing procedures. None of the other posters displayed were about cross contamination.

There are two sinks – one in the kitchen and another one in the storage area. Although the sink is used in the kitchen for both raw and ready to eat foods it is cleaned between uses with warm soapy water and a British Standard antibacterial spray. They use blue paper towels for drying rather than cloth towels to avoid cross contamination.

Appendix 6: Glossary

The following definitions which are included in this report and specific to the *E. coli* guidance are as follows:

- **‘anti-bacterial hand wash’** – hand sanitising products such as bactericidal liquid or foam soaps.
- **‘area designated for RTE foods’** – Also referred to as a ‘clean area’ – an area within a food establishment that is specifically designated for RTE foods and managed in a way that ensures that harmful bacteria such as *E. coli* O157 have been effectively excluded from all surfaces and from food handlers that will come in contact with RTE foods. The designated area can be used on a permanent basis or a temporary basis, where it is used at different times for raw foods.
- **‘BS EN’** – British Standard, European Norm. Disinfectants that comply with BS EN 1276 and/or BS EN 13697 published standards or alternative standards that meet the same conditions have shown to kill *E. coli* O157 if applied as directed by manufacturers.
- **‘chemical disinfection’** – reduction of the levels of microorganisms using approved chemical agents (disinfectants or sanitisers).
- **‘clean as you go’** – keeping the work area clean and tidy at all times whilst working. This may include cleaning up spills, wiping down surfaces, removing waste to bins and generally keeping the work area, tools and equipment and persons working in it to the required levels of hygiene to produce safe food.
- **‘complex equipment’** - items of equipment that can be very difficult to clean adequately between uses. In particular this may be because it is hard to access all parts of the equipment or because they are made up of a number of small parts and surfaces which may not be smooth or easy to clean. For example slicers, mincers and vacuum packing machines.
- **‘contact time’** – the period of time that the disinfectant needs to be left on the surface to work effectively.
- **‘contamination’** – the presence or introduction of a biological, physical or chemical hazard in a food or food environment.
- **‘critical limit’** – A criterion that separates acceptability from unacceptability for the prevention, elimination or reduction of identified hazards such as *E. coli* O157.
- **‘cross– contamination’** – the spread of harmful bacteria onto food from either other food sources, such as raw meat or soiled vegetables (known as direct cross-contamination) or from surfaces, hands or equipment that have been contaminated (known as indirect cross-contamination).
- **‘detergent’** – product used for general cleaning (to dissolve grease and remove dirt). Detergents do not have disinfectant properties (i.e. if used on their own they are not able to kill bacteria such as *E. coli* O157).
- **‘dilution rate’** – quantity of water to use with a concentrated chemical before it can be used. Always follow the manufacturer’s instructions.
- **‘disinfectant’** – product capable of reducing the levels of specific bacteria when applied to visibly clean surfaces at the specified dilution and for the recommended contact time.
- **‘FBO’** - Food business operator
- **‘foodborne’** – microorganisms, such as bacteria which use food as a vehicle to move onto humans where they can multiply.
- **‘HACCP’** – Hazard Analysis and Critical Control Points.
- **‘hand sanitising gels’** – hand sanitising products, such as alcohol–based gels / bactericidal (capable of killing bacteria) hand gels and wipes.
- **‘handling’** – to pick up and hold, move, or touch with the hands.
- **‘hazard’** – a biological, chemical or physical agent in, or condition of, food with the potential to cause harm to the consumer’s health.
- **‘leafy vegetables’**– includes but is not limited to all varieties of lettuce, spinach, cabbage, watercress, chicory, endive and radicchio and fresh herbs such as coriander, basil, and parsley.
- **‘monitoring’** – a pre–arranged programme of checks (observations or measurements) of critical and/or ‘legal’ limits to check whether control measures are in danger of failing and which determine the need to take corrective actions.
- **‘non–food contact surfaces’** – surfaces that do not normally come in direct contact with food (for example walls), but can potentially cause cross–contamination due to its close proximity to exposed food.
- **‘packaging’** – placing of one or more wrapped foodstuffs in a second container (and the second container itself).
- **‘protective clothing’** – coats, overalls, aprons, gloves, headgear and footwear.
- **‘raw foods’** – in this context include raw meat and any raw food, including fruit and vegetables and any ingredient that are potential sources of *E. coli* O157 (fresh or frozen). Raw fish and shellfish are outside the scope of this guidance as they are not potential sources of *E. coli* O157.
- **‘raw meat’**– uncooked red meat (including mince, bacon and sausages) poultry, game and offal. Raw meat includes both fresh and frozen meat.
- **‘ready–to–eat foods’** (RTE) – foodstuff or ingredients that are intended to be consumed without the need of further heat treatment or processing. For example cooked meats, washed / peeled fruits, salads, pies, bread, cheese and sandwiches.
- **‘recall’** – when customers are asked to return/dispose of a food product.

- **'root crops'** – include potatoes, onions, carrots, beets, and turnips.
- **'sanitisers'** – products that combine a disinfectant and a detergent in a single product. For effective disinfection they must be used twice: first to clean and then again to disinfect.
- **'sterilising sink'** - a sink unit used for sterilising equipment and utensils. Must be able to operate to a temperature capable to destroy *E. coli* O157.
- **'supervision'** – the process of overseeing the performing of tasks and procedures to ensure that they are carried out effectively and that the required standards are met.
- **'validation'** – collecting and evaluating scientific and technical information to determine whether the HACCP plan, when properly implemented, will effectively control the identified food hazards. "The business is going to do the right thing"
- **'verification'** – checking or confirming that the HACCP– based procedures are achieving the intended effect, i.e. food safety hazards are under control. "Confirmation that the business is doing what had planned to do".
- **'visibly clean'** – free from any visible grease or film or solid matter. A visibly clean surface can still be contaminated by harmful bacteria if it has not been disinfected.
- **'withdrawal'** – stop using/selling a food product.
- **'wrapping'** – placing of a foodstuff in a wrapper or container in direct contact with the foodstuff concerned, and the wrapper or container itself

Appendix 7: Limitations of the Research

In order to aid interpretation of the survey findings the following research limitations should be acknowledged.

7.1 Food businesses

The sample for the business survey is subject to a maximum standard error of +/-4.4% at the 95% confidence level on an observed statistic of 50% (adjusted). Therefore, we can be 95% confident that responses are representative of those that would be given by all businesses, had all relevant businesses completed a survey, to within +/-4.4% of the percentages reported.

The sample frame for the business survey comprised the business types from the Food Hygiene Rating database that the FSA deemed relevant for this research which were:

- Childcare/caring premises (excluding hospitals);
- Hotel/bed & breakfast/guest houses;
- Mobile caterers;
- Other catering premises;
- Restaurants/cafes/canteens;
- Takeaway/sandwich shops.

This meant that not all food businesses were included within the research and some businesses, such as butchers, which were previously included in the 2012 research were excluded.

The database used did not have telephone numbers therefore a tele-matching exercise was undertaken. This meant the number of mobile caterers within the sample were reduced due to the difficulties encountered with tele-matching this business type.

The database did not include information on business size, whether it is part of a chain/independent, nor whether the business is part of a Primary Authority Partnership (PAP). Therefore as the composition of the businesses with the database was not known these factors could not be replicated in the sample design or the achieved sample monitored for representativeness. Business characteristics, such as business size, whether business is part of a chain/independent or whether the business is part of a PAP were collected during the interview.

The business sample was structured to ensure it was nationally representative by nation (England, Wales and Northern Ireland) and then stratified within nation by business type and rating. This may mean that there are some regions which maybe over or under represented in the achieved sample.

Given the difficulty of contacting some businesses, in particular the smaller businesses, and the time constraints of the survey the sample was drawn on a 1 in 15 basis and although controls were put in place to ensure a number of attempts were made to each business and that the interviewing was conducted at different times of the day and week the achieved sample will still not be truly random of all businesses within the sampling frame.

Due to constraints on questionnaire length, and issues of comprehension, questions on the following themes were removed from the final questionnaire:

- Seeking advice on new FSA *E. coli* guidelines
- Cleaning products meeting BSEN standards
- Benefits of changes made following FSA guidance
- Changes made to products buy, sell or produce as result of FSA guidelines, and
- Impact of changes on business and financial costs of making changes to comply with FSA guidelines.

Although these points were explored to a degree in the Officer focus group and food business site visits, the evidence relating to these aspects is necessarily weaker.

Although some interviews were conducted in a language other than English, mainly Mandarin/Cantonese, not all language requests could be facilitated. Due to time constraints and budget the questionnaire was not translated in to the required languages and interviews were conducted on a bi-lingual basis. Also due to the complex nature of the subject and some of the questions, although the respondent could speak and understand English, some found the questions difficult to comprehend and answer. Following the pilot a number of amends were made to the questionnaire to help with this, however this did not eliminate all the issues.

The questionnaire could have benefited from more questions around changes made and not made with regards to the guidance and additional questions around guidance language requirements.

Due to budget and time constraints a telephone methodology was adopted. This meant that, with the exception of the site visits, the responses could not be physically verified.

As previously mentioned, comparisons with the 2012 results should be made with caution due to the changes in business types and areas used for this research.

7.2 Officers

The sample for the Officers survey is subject to a maximum standard error of +/- 7.9% at the 95% confidence level of an observed statistic of 50% (adjusted).

Local Authority contacts were unable to be provided for the West Midlands therefore, although achieved interviews were monitored by region to ensure the achieved sample was broadly representative of the contacts provided this excluded the West Midlands.

Appendix 8: Statement of Terms

Compliance with International Standards

BMG complies with the International Standard for Quality Management Systems requirements (ISO 9001:2008) and the International Standard for Market, opinion and social research service requirements (ISO 20252:2012) and The International Standard for Information Security Management ISO 27001:2013.

Interpretation and publication of results

The interpretation of the results as reported in this document pertain to the research problem and are supported by the empirical findings of this research project and, where applicable, by other data. These interpretations and recommendations are based on empirical findings and are distinguishable from personal views and opinions.

BMG will not be publish any part of these results without the written and informed consent of the client.

Ethical practice

BMG promotes ethical practice in research: We conduct our work responsibly and in light of the legal and moral codes of society.

We have a responsibility to maintain high scientific standards in the methods employed in the collection and dissemination of data, in the impartial assessment and dissemination of findings and in the maintenance of standards commensurate with professional integrity.

We recognise we have a duty of care to all those undertaking and participating in research and strive to protect subjects from undue harm arising as a consequence of their participation in research. This requires that subjects' participation should be as fully informed as possible and no group should be disadvantaged by routinely being excluded from consideration. All adequate steps shall be taken by both agency and client to ensure that the identity of each respondent participating in the research is protected.

With more than 25 years' experience, BMG Research has established a strong reputation for delivering high quality research and consultancy.

BMG serves both the public and the private sector, providing market and customer insight which is vital in the development of plans, the support of campaigns and the evaluation of performance.

Innovation and development is very much at the heart of our business, and considerable attention is paid to the utilisation of the most up to date technologies and information systems to ensure that market and customer intelligence is widely shared.

