FSA CAMPYLOBACTER REDUCTION PROGRAMME: UPDATE ON PROGRESS AND FUTURE IMPLICATIONS FOR FOOD STANDARDS SCOTLAND (FSS)

1. Purpose of the paper

1.1. An information paper was presented to the FSS Board on 15 June 2015[1] which outlined the UK Campylobacter reduction strategy and how FSS was working with the FSA and others to reduce the impact of this pathogen on public health in Scotland. The present paper highlights a discussion which is taking place at today's Food Standards Agency (FSA) board meeting on the progress which has been made in reducing Campylobacter in UK produced chickens and proposals for driving a future commitment to reducing the public health risks associated with this pathogen.

1.2. The FSA board discussion follows the publication[2] of the most recent round of results from the UK wide survey of Campylobacter contamination on fresh chickens at retail. These results confirmed that, whilst significant progress has been made in reducing the levels of Campylobacter contamination, the target agreed by FSA and industry to reduce the proportion of the most heavily contaminated chickens placed on the market by the end of 2015[3] has not been met.

1.3. The FSA board report to support these discussions (provided at Annex 1) acknowledges the UK wide significance of Campylobacter reduction and that it is a key priority for both FSA and FSS. In addition to requesting endorsement from the FSA board for the next phase of the Campylobacter reduction programme, the report also proposes that the FSS Board should be approached to ask if it would agree for the Chairs of the FSA and FSS boards to write to the major retailers asking them to take greater responsibility for transparency and to commit to regular publication of their own Campylobacter monitoring data.

1.4. FSS has been working closely with the FSA on the development of UK wide strategy on Campylobacter reduction in UK produced poultry. In parallel, we have also been developing a foodborne illness strategy for Scotland, which will set out FSS's approach for reducing the risks associated with food chain contaminants including Campylobacter. We aim to undertake a consultation on our foodborne illness strategy between April and July 2016, with a view to presenting a draft, informed by stakeholder responses, to the FSS Board in October.

---

[1] http://www.foodstandards.gov.scot/sites/default/files/Board%20meeting%20-%202015%20June%2015%20-%20paper%20150604%20-%20Campylobacter_0.pdf
[2] http://www.foodstandards.gov.scot/news/uk-industry-making-progress-campylobacter-reduction
[3] The joint FSA-industry target was set in 2010 aimed to reduce the percentage of the most heavily contaminated chickens (with more than 1000 colony forming units per gram of chicken (cfu/g) at the end of the slaughter process from 27% down to 10% by the end of 2015. This is equivalent to 7% of chickens at retail sale, taking account of the natural decline in Campylobacter levels from the end of the slaughter line on its passage through the chill chain.

1.5. The publication of the current FSA proposals for the next phase of the UK Campylobacter reduction programme provides an opportunity for the FSS Board to consider FSS's future role in this programme in the context of public health in Scotland.

2. Identification of risks and issues

2.1. The actions proposed in the FSA report will set a new direction for the UK strategy which transfers greater responsibility onto the retailers for publicising their progress in reducing Campylobacter in chicken beyond the 2015 target, and focusses the role of government on monitoring the impact on public health outcomes, and understanding consumer awareness of the risks and public expectations regarding Campylobacter control. A common approach to these proposals across the UK would provide a framework upon which FSS can develop its own future strategies for tackling Campylobacter in the context of public health in Scotland. Furthermore, a joint FSS/FSA strategy for engaging with the industry would help to ensure momentum is not lost, and that reductions in Campylobacter levels in UK produced chicken continue to be achieved.

3. The Board is asked to:

- **note** the progress made by the UK Campylobacter reduction campaign to date, and FSA's proposals for the next phase of the programme;
- **agree** that it would be appropriate for the Chairs of FSA and FSS to write jointly to the chairs of the boards of the major retailers asking them to commit to publishing their monitoring data on a regular basis to demonstrate their on-going commitment to Campylobacter reduction;
- **agree** that FSS continues to work with FSA to implement a UK Campylobacter reduction strategy;
- **note** the development of a foodborne illness strategy for Scotland, which will set out FSS's approach for reducing the risks of food chain contaminants, including a programme of work which will build on the UK Campylobacter reduction strategy.

Dr Jacqui McElhiney
Head of Food Protection Science and Surveillance
04 March 2016

4. Background

The UK Campylobacter reduction strategy

4.1. Campylobacter reduction has been a key food safety priority for the FSA since 2000, and continues to be an important goal in its strategic plan. Historically, Scotland has had one of the highest rates of Campylobacter infection in the UK, and in recent years, the number of reported cases in Scotland has increased. In recognition of the impact of Campylobacter on Scottish public health outcomes, Outcome 1 (Food is Safe) of FSS's draft Corporate Plan for 2016-2019 has highlighted this pathogen as a priority for action.[4]

4.2. Since 2000, FSA has led the UK strategy, which aims to reduce the prevalence of Campylobacter in poultry; the most significant source of human infection. The key objectives of this strategy are to raise awareness of the risks to public health and to influence the major retailers and poultry producers into taking action to control the pathogen at all stages of the production chain. A UK-wide approach is required to tackle Campylobacter due to the integrated nature of the poultry supply chain, which is dominated by a small number of major companies supplying to all of the major retailers UK wide.

4.3. A key output of the UK strategy was the development of a joint government/industry target which aimed to reduce the percentage of the most heavily contaminated chickens (with more than 1000 colony forming units per gram of chicken (cfu/g)) at the end of the slaughter process, from 27% in 2008 to 10% by the end of 2015. It has been estimated that the target of 10% of chickens contaminated with >1000 cfu/g at the end of the slaughter process would be equivalent to 7% of chickens being contaminated with this level at retail. Modelling has shown that achieving this target should lead to a reduction of 50% in the number of UK cases of foodborne Campylobacteriosis that are associated with the consumption of chicken.

4.4. Since the joint target was set, the industry has developed a range of interventions for reducing Campylobacter in the chicken production chain, which are now being implemented by different supply chains from farm to retail. A number of retailers have now publicised their commitment to investing in Campylobacter controls, and are reporting a demonstrable reduction in the levels of contamination.

4.5. FSA has been monitoring progress in achieving the target through the sampling of chicken both at the end of the slaughter process, and at retail sale in the UK. Results obtained up to the end of 2015 showed that whilst some progress has been made, the

[4] http://www.foodstandards.gov.scot/sites/default/files/FSS%20draft%20Strategy%20and%20Corporate%20Plan%20-%20consultation%20-%20February%202016.pdf

agreed target has not been met, with 23% of chickens at the end of slaughter[5], and 11% of chickens at retail[6] showing levels of contamination which have the potential to cause human illness (>1000 cfu/g).

4.6. Nonetheless, the latest results from the retail survey suggest that interventions put in place by the industry are having an impact on the levels of contamination that are being picked up in chicken placed on the market. In each of the last two quarters' data, covering chicken on retail sale between July and December 2015, the proportion of chickens that were most highly contaminated were around two-thirds of the equivalent figures for the same period in 2014.

4.7. In light of the progress to date, the FSA board agreed to roll forward the target date beyond 2015 as it is expected that on-farm and processing interventions being taken forward by the industry will lead to significant improvements. The report being presented today to the FSA board, highlights a renewed confidence that the 10% target will be met by the industry as a whole by the end of 2016.

4.8 In its report, FSA outlines a new programme of work aimed at delivering a lasting commitment by the industry to Campylobacter reduction which has a demonstrable impact on public health; proposing a notional target of 100,000 fewer estimated cases of human Campylobacteriosis in the UK by the end of March 2017. This is an ambitious target, and the report accepts the challenges associated with quantifying the impact of FSA strategy on public health; particularly in light of the contribution made by environmental exposure routes to human infection. The report recognises that it will be necessary to work with others to achieve a reduction in the overall number of human cases of Campylobacter, and notes the role of interventions relating to agricultural practice, which have an important part to play in reducing transmission of the pathogen via the environment and ruminant sources.

4.9. The programme of work to support the next phase of Campylobacter reduction is to focus on the following key areas:

- For the UK to engage with the EU on future poultry official controls and develop an evidence base to inform decisions on appropriate legislative criteria for Campylobacter levels on raw poultry;

- For retailers to adopt a more transparent approach by taking responsibility for reporting the results of their own Campylobacter monitoring programmes and

[5] http://www.food.gov.uk/news-updates/campaigns/campylobacter/actnow/act-e-newsletter/the-slaughter-house-target

[6] http://www.food.gov.uk/news-updates/news/2016/14910/signs-of-further-progress-on-campylobacter-reduction

letting their customers know how they are progressing against a statement of their commitment to Campylobacter reduction beyond the 2015 target;

- For FSA and FSS to place greater focus on establishing the contribution made by smaller independent poultry producers and the sectors they supply and what actions they need to take to reduce the risks of Campylobacter;

- For FSA and FSS to improve consumer knowledge of Campylobacter and understand their expectations with regard to the control of this pathogen in the food chain.

Implications for Scotland and future FSS strategy for reducing the risks of Campylobacter to the Scottish population

4.10. The update paper which was presented to the FSS Board on 15 June 2015[7] outlined the UK Campylobacter reduction strategy and how FSS was working with the FSA and others to reduce the impact of this pathogen on public health in Scotland. This paper highlighted the focus which has recently been placed, by Scottish Government, on Gastrointestinal Zoonoses (GIZ) including Campylobacter and the work that FSS is taking forward in partnership with Health Protection Scotland (HPS) to promote multi-agency and inter-disciplinary approaches for controlling foodborne and non-foodborne transmission routes and reducing the public health impact associated with GIZ pathogens.

4.11. FSS identified three key areas where there was scope for FSS to support and augment the UK Campylobacter strategy:

- **Promoting action to reduce Campylobacter by the poultry industry operating in Scotland** by engaging with the major retailers and poultry producers in our own right to promote Campylobacter control in the interests of public health in Scotland, and driving hygiene improvements in Scottish poultry production;
- **Raising awareness of Campylobacter risks at catering and in the home** through targeted communication activities in Scotland;
- **Commissioning research and surveillance** to improve understanding of Campylobacter risks in the Scottish food chain and the epidemiology of Campylobacter infection in Scotland.

4.12. These proposed areas of work are complementary to the vision set out in the FSA board paper, but also provide scope for FSS to target Campylobacter interventions

[7] http://www.foodstandards.gov.scot/sites/default/files/Board%20meeting%20-%202015%20June%2015%20-%20paper%20150604%20-%20Campylobacter_0.pdf

which are likely to have the greatest impact on public health outcomes in Scotland. The workstreams which are currently being taken forward by FSS include projects to monitor the levels and types of Campylobacter which affect chicken produced in our largest poultry plant in Scotland, and how these correlate to human infection. In parallel, we are undertaking research to understand why the risk of Campylobacter infection varies between different population groups in Scotland, to help us to target communication more effectively to the needs of Scottish consumers.

4.13. Future work on Campylobacter will be underpinned by our forthcoming Foodborne Illness Strategy, which will be presented to the FSS board in October. When developing new projects on Campylobacter we will take account of the proposals in the FSA Board paper by looking at the risks associated with smaller independent poultry producers in Scotland, and engaging with Scottish consumers to ensure we understand their expectations with regard to Campylobacter contamination and intervention.

4.14. A further area where FSS has the potential to make a valuable contribution to strategy for reducing the overall burden of Campylobacter infection both in Scotland and UK wide is in the understanding of the relative contributions made by food and non-food sources to human illness. Research led by FSS has provided key evidence to demonstrate the importance of ruminant reservoirs of the pathogen, which are estimated to be associated with approximately 20-40% of cases of Campylobacteriosis in Scotland.[8] Continued research in this area will allow us to monitor the impact of food chain controls on human infection in Scotland and demonstrate where there is a need for other government agencies to instigate environmental and agricultural interventions aimed at preventing Campylobacter transmission. In this regard, FSS is well placed to promote action across government to reduce the burden of this important GIZ pathogen on public health through its involvement in the Scottish Health Protection Network.

5. Conclusion

5.1. This paper sets out the progress which has been made in reducing Campylobacter in UK produced chickens and proposals for driving a future commitment to reducing the public health risks associated with this pathogen.

5.2. **The Board is asked to:**

- **note** the progress made by the UK Campylobacter reduction campaign to date, and FSA's proposals for the next phase of the programme;

[8] Sheppard SK, Dallas JF, Strachan NJ, MacRae M, McCarthy ND, Wilson DJ, Gormley FJ, Falush D, Ogden ID, Maiden MC, Forbes KJ. (2009) Campylobacter genotyping to determine the source of human infection. Clinical Infectious Diseases 48(8):1072-8
http://www.ncbi.nlm.nih.gov/pubmed/19275496

- **agree** that it would be appropriate for the Chairs of FSA and FSS to write jointly to the chairs of the boards of the major retailers asking them to commit to publishing their monitoring data on a regular basis to demonstrate their on-going commitment to Campylobacter reduction;
- **agree** that FSS continues to work with FSA to implement a UK Campylobacter reduction strategy;
- **note** the development of a foodborne illness strategy for Scotland, which will set out FSS's approach for reducing the risks of food chain contaminants, including a programme of work which will build on the UK Campylobacter reduction strategy.