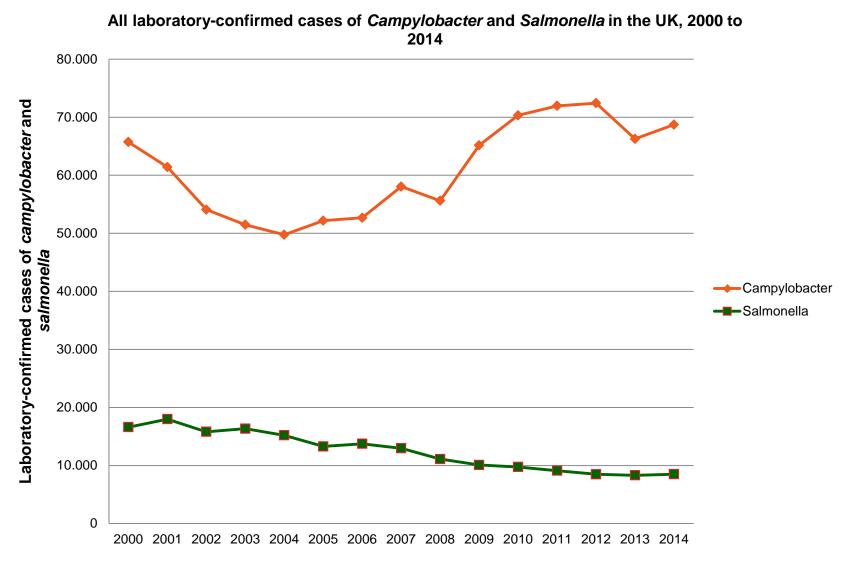
The UK experience in controlling *Campylobacter*

2

WHY CAMPYLOBACTER IS THE FSA'S TOP PRIORITY?

.

Why Campylobacter?



© 2015 Food Standards Agency

1,000 hospitalisations Age groups most at risk

Can kill

66,500

4 in 5 cases come from contaminated poultry

1,000 hospitalisations

Under

- 280,000

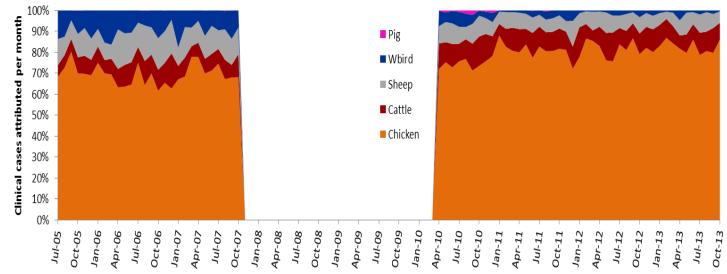
Why poultry?

Raw poultry meat is the most significant source of *Campylobacter* for human infections

- EFSA poultry meat 20-30%
- Poultry reservoir: 50-80%

FSA and EFSA surveys show high UK prevalence (65% - 86% - 6th highest

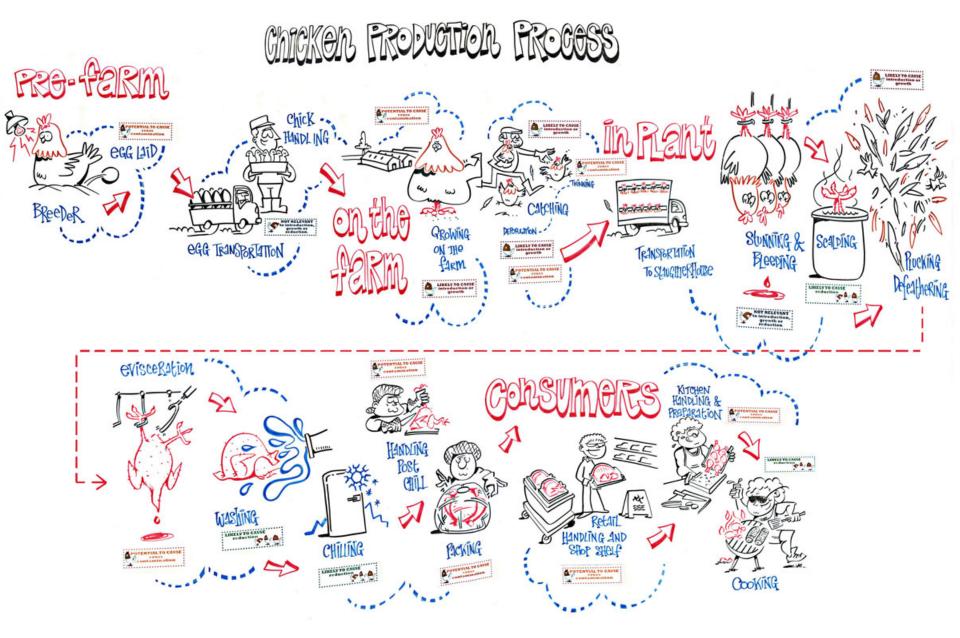
prevalence)



CAMPAIGN

.

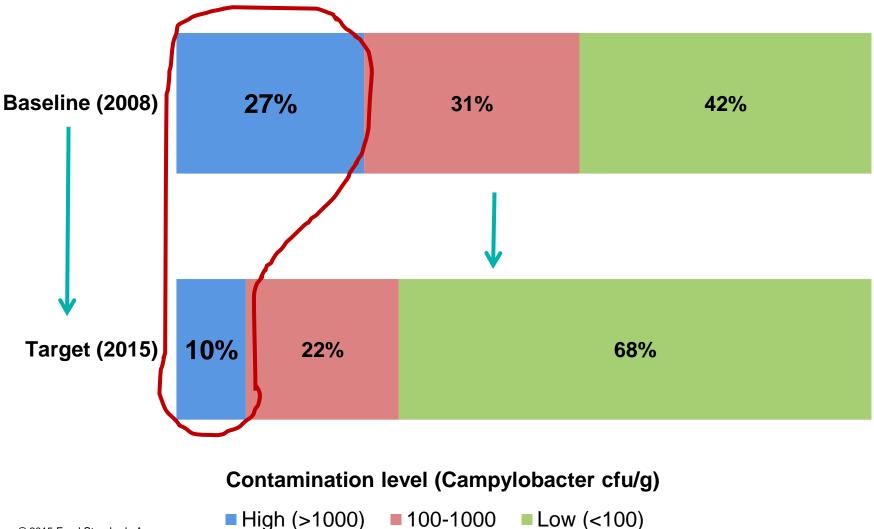
Acting on Campylobacter Together



TARGET

.

Campylobacter reduction target



Monitoring the target

	<100 cfu/gr	100-1000 cfu/gr	>1000 cfu/gr
Baseline 2008	42%	31%	27%
Data Mar 2012 – Feb 2015	37.00% No significant change	33.20% No significant change	29.81% No significant change
Target 2015	Improv (higher %	10%	

- FSA-funded independent monitoring: samples from slaughterhouses
- Commenced March 2012 to assess any statistically significant change after full 12 months
- Will continue for the life of the FDS to continue monitor progress towards the target
- There is also an on going industry monitoring

INTERVENTIONS ON FARM...

.

STEPS TO REDUCE CAMPYLOBACTER AND IMPROVE FLOCK HEALTH

VISITORS, VEHICLES AND TRANSPORT







© 2015 Food Standards Agency



By Chloe Ryan

Two UK companies have announced a partnership aimed at developing a feed additive for poultry to reduce levels of campylobacter in chickens.

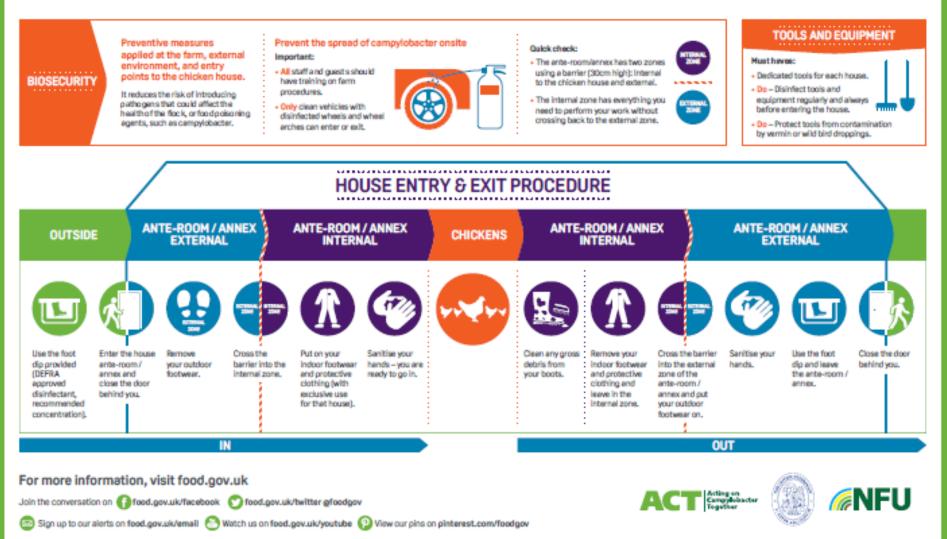
Banham Poultry and Akeso Biomedical said they would work together to seek to significantly reduce levels of campylobacter on poultry farms, using technology named Fe3C.





CAMPYLOBACTER BIOSECURITY GUIDE YOU CAN MAKE A DIFFERENCE

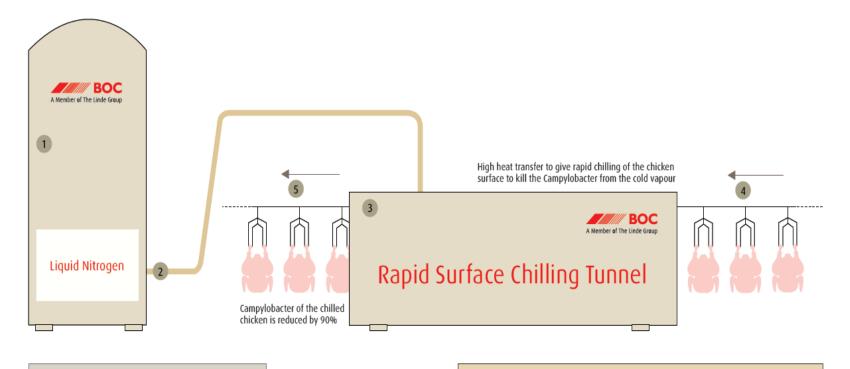




INTERVENTIONS SLAUGHTERHOUSE...

.

Rapid Surface Chilling



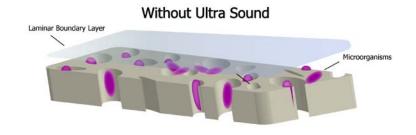
- 1. Onsite Liquid Nitrogen tank (99.999% pure, -196°C)
- 2. Super insulated vacuum liquid nitrogen line
- 3. Rapid Surface Chilling[™] tunnel
- 4. Chicken conveyor line entering tunnel
- 5. Chicken conveyor line exiting tunnel

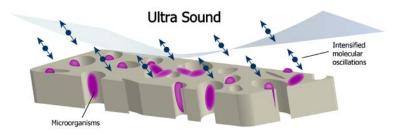
- Rapid Surface Chilling[™] does not affect taste, texture, appearance, or weight of the chicken
- Chicken meat remains fresh chilled and not frozen
- The Rapid Surface Chilling[™] process can be added to existing air-chilling chilling lines

Rapid Surface Chilling [™] BOC Linde Group

• • • • • • • • •

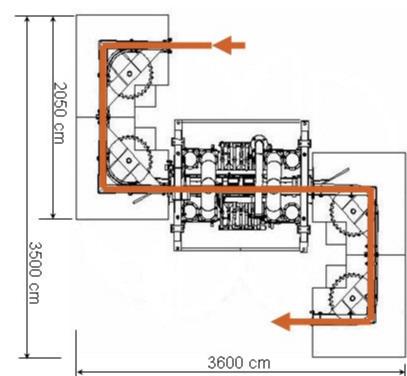
Steam and ultrasound







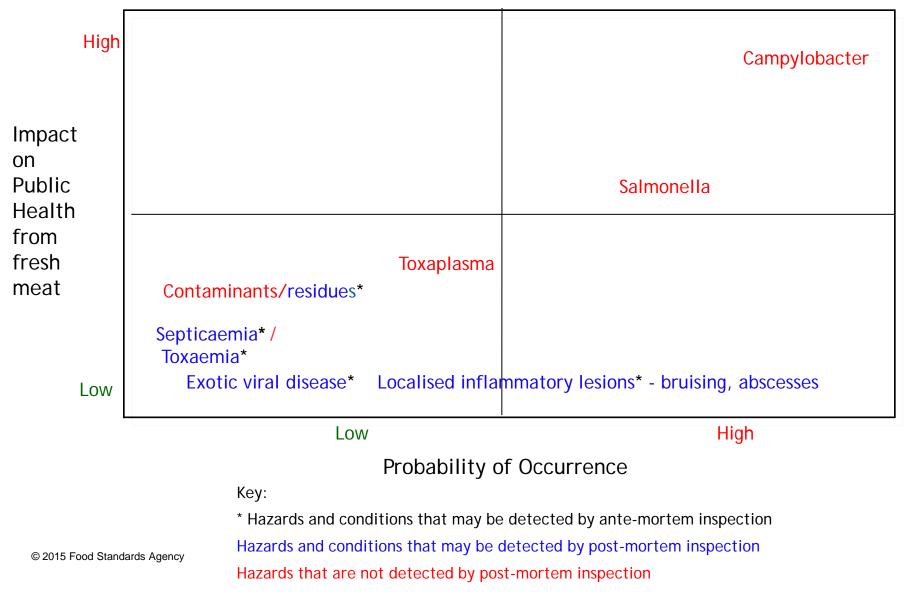




OFFICIAL CONTROLS

.

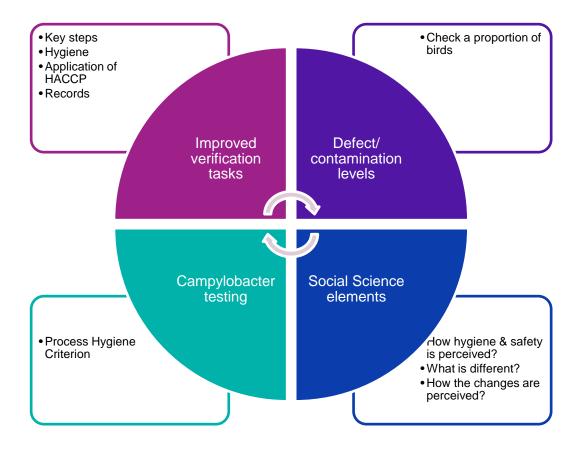
Detection of known hazards and other conditions in poultry and poultry meat



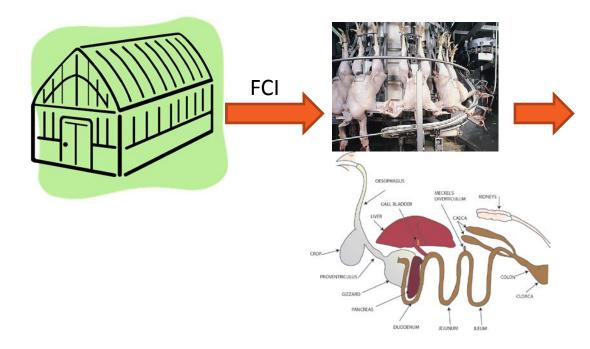
Pilot in poultry slaughterhouses Main principles...

- Improve controls on campylobacter and other microbiological hazards
- Increase FBO responsibility/ accountability. Concentrate official tasks purely on the verification of FBO's compliance with the legislation and its enforcement
- Remove 'redundant' tasks
- Maintain consumer confidence (food safety, animal health and welfare)
- Do not disturb international trade

Main pillars of the pilot



Campylobacter testing





Who?	Ba	aseli	ine	Ρ	re-tr	ial	Trial							Number of	All samples	
Week	1	2	3	4	5	6	7	8	9	10	11	12	13	14	pairs (caeca & skin)	(caeca + skin)
FSA															8	16
FBO															22	44

Campylobacter testing – Process Hygiene Criterion

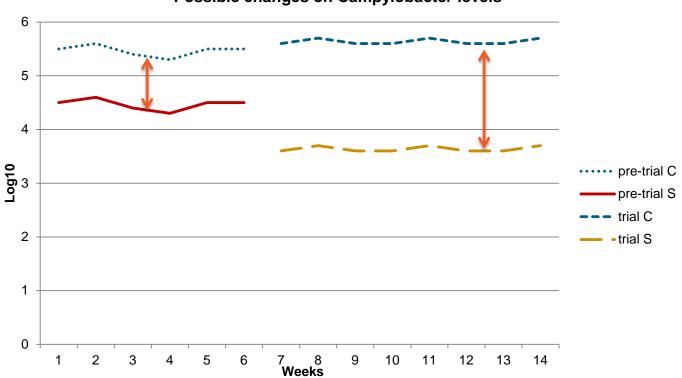
During 5 weeks: for each flock

- 1 caeca sample (3 pooled caeca) [=5 caeca]
- 1 neck skin (3 pooled skins) [n = 5 neck skins]

Results (for n)	C (neck skin)	m / M	
Satisfactory	5	≤ M	
Satisfactory	≤ 3	m - M	
Unsatisfactory	≥ 1	> M	OR
Unsalisiaciony	>3	m - M	

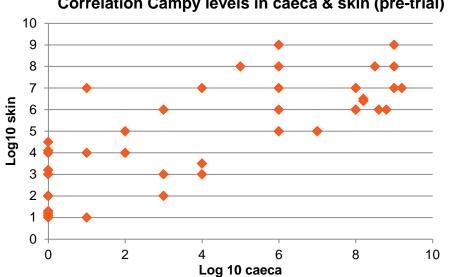
m = 1,000 cfu/ gr (
$$10^3 = 3 \log s$$
)
M = 10,000 cfu/ gr ($10^4 = 4 \log s$)

Measures – improved hygiene/ processing?

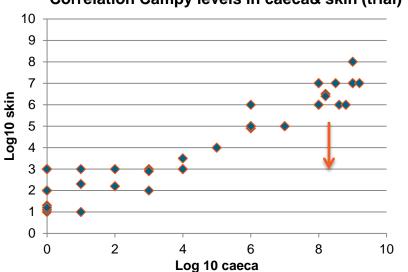


Possible changes on Campylobacter levels

Measures – improved hygiene/ processing?

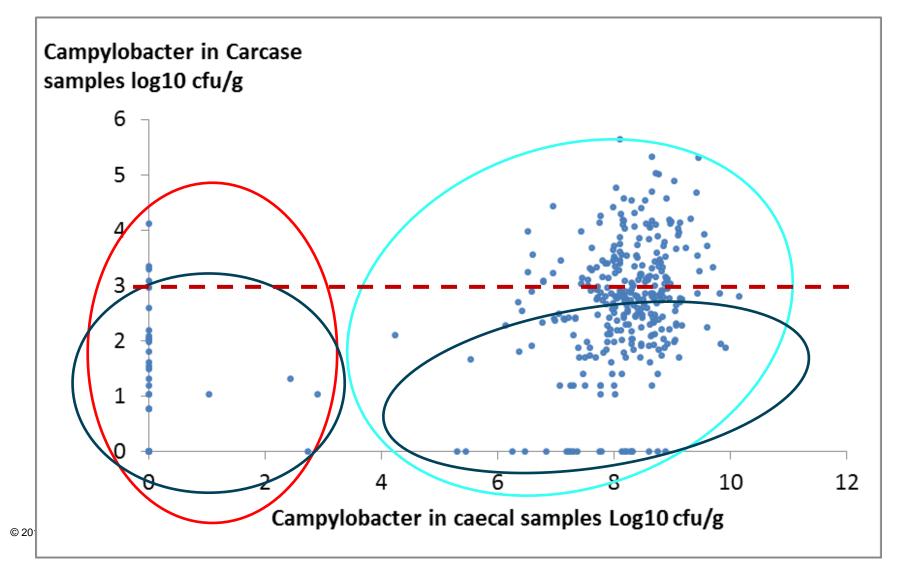


Correlation Campy levels in caeca & skin (pre-trial)



Correlation Campy levels in caeca& skin (trial)

The relationship between campylobacter in caeca and skin samples (Apr 14 to Nov 14 – 400 samples)



Social Science elements

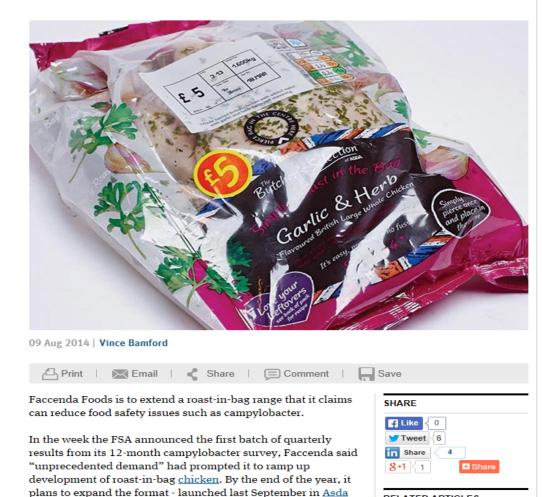
- to explore views towards the trial (key audiences); comparing views pre / during / post intervention
- to understand implementation of the new system, (whether the modernised poultry inspection system was implemented as intended)
- to identify enablers of and barriers and if and how challenges are overcome
- to establish the trial's effect on faecal and defect rates (statistical analysis)
- to assess microbial analysis to understand the trial's impact on the prevalence of Campylobacter so as to inform the development of a PHC
- to investigate whether the trial has an effect on attitudes and behaviours in relation to food safety and the delivery of refocussed official controls more generally amongst FBOs, plant staff and officials

CONSUMERS

.....

Retail activities

Campylobacter war aided by roast in bag format says Faccenda



RELATED ARTICLES

Consumer organisations



THIS MONTH CHICKEN WASHING RISK FOOD VOTING VICTORY AND DEFEAT BITTER PINE NUT?

WASHING CHICKEN COULD ADD TO FOOD POISONING RISK

Three quarters of people who buy whole chickens wash them, as revealed by Which? research, increasing the risk of food poisoning for themselves and their family. If chicken is contaminated with bacteria, washing it can spread that bacteria on to work surfaces for up to a one-metre radius. A recent study by the Food Standards Agency (FSA) found that 65% of raw shop-bought chicken is actually contaminated with the campylobacter bug, which accounts for a third of all food-borne illnesses and commonly causes severe diarrhoea.

RAW SHOP-BOUGHT AMPYLOBACTER BUG poisoning a year, including 15,000 hospitalisations and 80 deaths - more than E coli. Campylobacter causes an But very few people are aware estimated 30,000 cases of food of it. When we asked over

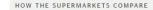
65%

birds are reared and workers changing their clothes and shoes. The FSA is looking into whether these measures can be introduced. More controversially, chickens can also be cleaned in antimicrobial wash though we believe this method needs to be carefully examined. To reduce any risk, campylobacter can be easily killed by thoroughly cooking 1,000 members of the public chicken - you don't need to wash it. what they thought the largest

Which?s chief policy adviser, Sue Davies says, 'It shouldn't be up cause of food poisoning was 56% said salmonella and only to consumers to dean up problems 2% identified campylobacter. made earlier in the food chain."



Daily Mail



The Safe Chicken Checklist

	% tested positive	% tested positive for the highest levels	Action plan from farm to fork?*
Asda	78.9	31.1	PUBLISHED
Morrisons	76.2	22.9	
Со-ор	75.6	16.4	PUBLISHED
M&S	72.2	20.7	PUBLISHED
Waltrose	71.7	15.6	PUBLISHED
Sainsbury's	69.6	14.3	
Tesco	68.2	12.3	PUBLISHED
Aldi **			PUBLISHED
Lidl **	76.9	23.2	PUBLISHED
Iceland**			PUBLISHED

*A CEO endorsed, integrated programme of immediate and planned interventions along the food chain to tackle Campylobacter levels. This should be published on their website and include timescales.

2010 survey of 1000 people:

 56% thought Salmonella was the main cause of food poisoning

How safe is

icken under the microscope and reveal the risk of food poisoning

supermarket chicken?

- 2% said it was Campylobacter
- 73% washed their chicken before cooking it.

© 2015 Food Standards Agency





Which?

More can be done across

the whole production chain to

reduce the level of infection -

including improved hygiene

in slaughterhouses, fitting fly

screens to the houses where

FSA activities

Tackling Campylobacter is a shared responsibility, and consumers have roles to play.

For the last 2 years Food Safety Weeks in June/ May have focused the attention towards campylobacter

"Stop #PlayingChicken with your health. Don't risk food poisoning by washing chicken. Spread the word

Don't wash raw chicken

Don't wash raw chicken before cooking. Splashing can spread campylobacter on to surfaces, clothing and equipment which can lead to serious illness. Thorough cooking kills campylobacter.

Campylobacter is the most common cause of food poisoning in the UK. food.gov.uk/facebook
Idfoodgov
food.gov.uk/twitter

Food Standards Agency food.gov.uk

food.gov.uk/chicken

Published by the Food Standards Agency February 2014. © Gravin copyright 2014. Printed in England on paper comprising a minimum of 75% recycled fibre. FSA/1722/0114

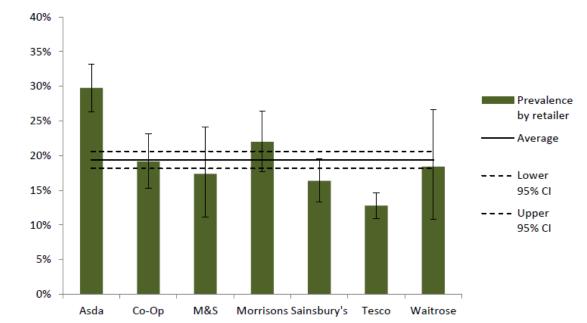


Retail survey

19% of chickens tested positive for Campylobacter within the highest band of contamination* (>1000 cfu/g)

73% of chickens tested positive for the presence of Campylobacter0.1% (five samples) of packaging tested positive at the highest band of contamination.

7% of packaging tested positive for the presence of Campylobacter.



© 2015 Food Standards Agency

The other headlines...

The retail survey made the Campylobacter issue visible to consumers for the first time. We are about to publish the first full year's figures. We anticipate further media interest.

seed.	Chickens contaminated	Contaminated at highest level	Packs contaminated on outside
11 Asda	79%	31%	13%
Asda Morrisons	76%	23%	13%
CTEt Co-op	76%	16%	4%
Co-op M&S Waitrose Sainsbury's	72%	21%	4%
Waitrose	72%	16%	6%
Sainsbury's	70%	14%	4%
Tesco	68%	12%	4%
Others*	77%	23%	7%
TOTAL	73%	19%	7%

Consumer awareness equals consumer power...

We test the effect of our messages before we run them:

How many would:

- agree that the chicken industry needs to do more to reduce the level of Campylobacter on chicken?
- try to find out more about the levels of Campylobacter in chicken sold in the shops?
- change where they buy chicken based on whether it met FSA standards?

Source – campaign tracking survey, 2000+ participants, Jan 2015

QUESTIONS AND DISCUSSION

javier.dominguez@foodstandards.gsi.gov.uk

y javiorive