

## Microbiology bulletin 32

### FSA to suspend Campylobacter survey

The Food Standards Agency has suspended its survey of Campylobacter contamination on chickens after measures taken by processors to combat the pathogen made survey comparisons misleading.

The results of the second quarter of the survey, which were published on 25 February, showed 11 per cent of chickens tested positive for the highest level of contamination, which is down from the 19 per cent recorded in the same period the previous year.

The FSA's method for testing Campylobacter enumeration has been to measure the neck skin of the chicken because this is generally the most contaminated part of the bird. However the agency stated that many processors are now removing the neck skin before birds reach retailers.

Although the FSA said this measure reduces Campylobacter and helps protect consumers, the different amounts of neck skin on each carcass now make it impossible to fairly compare contamination between retailers using this method.

The survey has therefore been suspended and a restart of testing in summer using a new method is being proposed, and in the future retailers may be asked to provide their own sampling results to an FSA standard.

The Advisory Committee for the Microbiological Safety of Food (ACMSF) have proposed alternative sampling techniques which include a whole carcase rinse method. They state that unlike neck skin or single skin sampling sites, a whole carcase rinse will give a contamination level representative of the whole chicken.

They state that a whole carcase rinse provides a 'constant' measure, giving a consistent and futureproof indication of the overall contamination burden of the carcase and has the additional benefit of not being liable to become obsolete with further retailer interventions.

One disadvantage however of using a carcass rinse for the assessment of Campylobacter levels could potentially be the inclusion of contamination from the internal cavity in the total enumeration results.

The FSA said that Campylobacter levels were still too high and the bacterium remains a top priority, and said it is setting itself a new target to reduce the number of human cases of Campylobacter poisoning by 100,000 a year.

Steve Wearne, Director of Policy at the FSA said:

"Tackling Campylobacter remains our number one priority. The ultimate test to show whether our campaign is working is to see whether fewer people get ill.

"That's why we want to see 100,000 fewer cases of Campylobacter each year from the end of March 2017. So there's no let up for industry: we want to see continuing efforts to reduce Campylobacter on our chickens."



### Artisan cheesemaker banned after Salmonella, Listeria and E coli detected in products

A judge branded an artisan cheese-making operation based in Somerset as 'shoddy' and 'amateurish' after hearing that products such as buffalo mozzarella was found to contain Salmonella, E.coli and the Listeria.

Another Australian Salmonella outbreak - this time linked to beansprouts

Following the recent outbreak of Salmonella in the Australian state of Victoria which was thought to be associated with bagged salad leaves, a further outbreak has been reported, this time linked to the consumption of beansprouts.

THE Department of Health in South Australia is warning SA residents not to eat raw bean sprouts following a large increase in the number of reported salmonella cases.

Over the past 11 days there have been 108 salmonella cases reported in South Australia, which normally sees around 15 to 20 cases each year.

Since the start of December, SA Health has been notified of 233 cases of Salmonella. Of these 233 cases, 43 people have been hospitalised.

# Marine bacteria causes more deaths than shark attacks

Still in Australia this eye catching headline followed research by scientists at the University of Technology in Sydney.

They were reporting on the fact that they had detected higher numbers than normal of Vibrio species in the waters around Sydney harbour including *Vibrio vulnificus* which they state is responsible for 95 per cent of all seafood-related deaths in the US, and aggressive flesh-eating infections in swimmers, where it carries a mortality rate of up to 50 per cent amongst those infected. The report's authors stated that they believed that global warming was a significant factor in the observed increase.

### Effective hand washing techniques

A study carried out by the Glasgow Caledonian University on hand washing techniques concluded that the World Health Organisations six step hand hygiene technique gave quantifiably better results than other methods.

For those of you who are not familiar with the technique (I wasn't), it is as follows

Wet hands and apply soap or hand sanitiser. Rub palms together until soap is bubbly.

2. Rub each palm over the back of the other hand.

3. Then rub palm to palm with your fingers interlaced.

4. Rub the backs of your fingers against the opposite palm while interlocking your fingers.

5. Clasp your left thumb in your right palm and rub in a rotational motion, then switch hands and carry out the same step.

6. Finally, carry out rotational rubbing backwards and forwards while clasping the fingers of your right hand in the palm of your left and vice versa.

As I have mentioned (many times) before, do remember that hand washing only removes the potentially pathogenic transient bacteria from our hands and no amount of hand washing will eliminate all the skin flora which is embedded in the epidermal layers of our skin.

#### Drug resistance in Campylobacter

Data collated by Public Health England shows that almost half of all human Campylobacter cases tested in England for resistance to ciprofloxacin returned positive results. The data reveals that resistance rates have risen from 30% in 2005 to 48% in 2015.

Dr Ron Dixon, microbiologist at the University of Lincoln, said that any rise in resistance to ciprofloxacin in human Campylobacter cases was "extremely worrying".