ADVISORY COMMITTEE ON THE MICROBIOLOGICAL SAFETY OF FOOD

INFORMATION PAPER

EPIDEMIOLOGY OF FOODBORNE INFECTIONS GROUP (EFIG)

1. The most recent meeting of this group was held on 5 November 2009.

Review of animal data for January – June 2009

2. The number of provisional reports of *Salmonella* from livestock were the same as those for the same period last year. The number of *Salmonella* incidents for chickens fell by 54% mainly due to a fall in the number of *S*.Enteritidis and *S*.Typhimurium reports. The most commonly reported serovars were *S*.Senftenberg, *S*.Livingstone and *S*.Mbandaka An increase in reports of *Salmonella* incidents was seem in turkeys (26.9%), cattle (21.2%) ducks (16.2%) and pigs (14.5%) compared to January – June 2008. These figures exclude isolates subsequently identified as vaccine strains, which have increased slightly compared with the same period last year. Investigation of exceedances in reports of *Salmonella* Dublin in cattle are ongoing and an isolate of *S*.Dublin with multiple drug resistance (ACSSuT) is also being investigated.

3. *Salmonella* 4,5,12:i:- (a variant of *Salmonella* Typhimurium that cannot be fully serotyped due to absence of second phase flagellar antigens) has been reported from pigs and has previous been reported from cattle in the UK. This monphasic serovar has been seen in other EU countries including isolations from humans and further work is being undertaken to characterise the strains.

4. Reports of *Listeria* in livestock showed no clear trend. Among other non-statutory diseases, an increase in cryptosporidiosis in calves was noted as in the previous report.

5. Findings from the National Control Plan monitoring of *Salmonella* will be reported in the next update. Monitoring of turkey flocks under the National Control Plan is expected to begin next year.[*]

Review of human data for January - September 2009

6. For the UK as a whole there was a decrease of about 20% in faecal isolations of non typhoidal salmonellas for the first 9 months of 2009 compared to the same period in 2008. This is a continuation of the downward trend seen in most UK countries in recent years. Much of the decline appears to be due to a decrease in reports of *Salmonella* Enteritidis. However, in England and

[*] For clarity the second sentence of this paragraph has been amended following the meeting.

Wales an increase in faecal isolations of *Salmonella* Enteritidis PT14b with resistance to nalidixic acid and low level resistance to ciprofloxacin has been seen in the first 9 months of 2009 (particularly since August) compared to the same period in 2008.

7. Both *Listeria* and VTEC O157 reports have shown a levelling out over the last 4-5 years although the number of *Listeria* reports is still almost twice that seen in the late 1990s. For both VTEC O157 and *Listeria* there has been a slight increase in the first 9 months of 2009 compared to the same period in 2008. An increase in pregnancy associated cases of listeriosis has also been seen in 2009. On VTEC O157, the HPA reported on the work they have been undertaking using questionnaire data from cases as a hypothesis generating tool.

8. Reports of *Campylobacter* continue to show an upward trend. Provisional UK figures for the first 9 months of 2009 show an increase of about 10% in comparison with the same period in 2008 with an increase being seen in all UK countries. In terms of provisional data for foodborne outbreaks in 2009 a notable feature has been the occurrence of 3 *Campylobacter* outbreaks associated with chicken liver pate/parfait in England and Wales.

9. Colleagues from the FSA's operational research unit reported on work they have been undertaking to examine the increase in reported cases of *Campylobacter* for the first half of 2009. The increase was seen in all regions and all age groups with the over 60's showing the greatest increase. Associated factors being examined include reporting, weather, travel abroad and poultry meat consumption patterns.

Food surveys

10. The group received a presentation on the FSA's 2007 survey of *Campylobacter* and *Salmonella* in retail chicken which was published on 6 October 2009. Members were updated on progress with preparing the red meat and cold sliced meats and pate surveys for publication and the EU wide retail survey of *Listeria* in packaged hot or cold smoked or gravad fish, soft and semi-soft cheeses and packaged heat treated meat products which will run for one year from January 2010.

Antimicrobial resistance

11. The group were informed that the FSA is currently scoping an FSA strategy on antimicrobial resistance following publication of the report on the stakeholder meeting on antimicrobial resistance in the food chain in August 2009. Also discussed were multidrug resistant *Salmonella* isolated during the FSA chicken survey, findings from the ASM/ESCMID sponsored conference on MRSA in animals held in London in September and the forthcoming second overarching report on antimicrobial resistance which will bring together data for 2007 on antimicrobial resistance in bacteria from animal, human and food sectors. In Europe EFSA is preparing a community summary report on antimicrobial resistance in zoonotic agents from animals and food in the European Union for 2004-2007.

Other items

12. The group also received an update on the EFSA tasks force on zoonoses data collection, European Commission report on the state of play on the control of food-borne *Salmonella* in the EU and progress with EFSA's technical specifications for the monitoring and reporting of verotoxigenic *E.coli* (VTEC) on animals and food

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December 2009