

PAPER FOR INFORMATION
ADVISORY COMMITTEE ON THE MICROBIOLOGICAL SAFETY
OF FOOD (ACMSF)

EPIDEMIOLOGY OF FOODBORNE INFECTIONS GROUP (EFIG)

1. The last meeting of this group was held on 6 October 2005.

Review of animal data for 2004 and the first half of 2005

2. The 2004 *Salmonella* figures have now been published by VLA and can be viewed on their website. *Salmonella* reports have decreased by 13% compared with 2003. This reduction was seen in all species except ducks and horses and there were decreases in both *S. Enteritidis* and *S. Typhimurium*.
3. These trends continued in the first six months of 2005, with a decrease of 15% in all reports of *Salmonella* in comparison with the same period in 2004. The decrease was seen in most species, with the exception of pigs. In pigs, *Salmonella* Typhimurium remains the most common serovar (76% of incidents in this period), and the most frequently reported phage types were U288 and DT193. A total of 31 farm visits were carried out under the Zoonoses Action Plan for pigs. During the first quarter, 37% of samples taken during these visits were positive for *Salmonella*, with a variety of serovars being identified. During the second quarter, the figure was 20%.
4. In view of the increased number of cases seen in humans, a report on incidents of *Listeria* from 2000 – 2004 had been requested. Most reported incidents were in sheep, mainly occurring in silage-fed animals during the winter months, and in cattle. In both species there was an increase in incidents in 2002 and 2003 but the numbers are very low and provisional figures for 2004 do not suggest that this is an established trend.
5. Three farms associated with human VTEC outbreaks were visited during the first 6 months of 2005, but in all cases the association was with open farm visits rather than foodborne outbreaks.

Review of human data

6. The group considered data from 2004 and the first half of 2005. *Salmonella* reports for the UK as a whole had decreased in 2004 in comparison with 2003, and this decrease had been sustained into the first half of 2005. However, there had been a doubling of reports from Northern Ireland in 2004, due to three large outbreaks.
7. Reports of *S. Enteritidis* continued to decrease. Despite a number of outbreaks of non-PT4 in England in 2004, there was in fact a reduction in the number of non-PT 4 reports in comparison with 2003, and this decrease has continued into 2005.
8. In 2004, reports of *Salmonella* Typhimurium continued to decrease in the UK as a whole. There was an increase in reports of *S. Typhimurium* DT104 in comparison with 2003 but this was the first year where such an increase was seen after a very steep decrease between 2000 and 2003. There was also a marked increase in reports from Northern Ireland, reflecting a large outbreak in the Autumn.
9. The downward trend in *Campylobacter* reports continued, with a decrease of around 24% since 2000. However, after a number of years when the number of reports had decreased, there had been an increase in VTEC O157 reports in England over the last 2 years. The sharp increase in *Listeria monocytogenes* in England in 2003 and 2004, which was the subject of a paper from HPA discussed at the September meeting of ACMSF, continues into 2005. The change appears to have affected only England.
10. A total of fifty three foodborne outbreaks were reported in E&W for 2004. Just over 50% of these were due to *Salmonella* Enteritidis, of which 70% were non-PT4. Special monitoring of *Salmonella* Enteritidis outbreaks is continuing. With the exception of July, when there were a number of PT6 outbreaks in the North East that appeared to be related to eggs from the Netherlands, the number of outbreaks was much reduced in 2005.
11. Five outbreaks of *Clostridium perfringens* were reported and members asked for more information on these as it represents a higher level of reporting than has been the case in recent years. Members also noted that there was now more than one system by which outbreaks were reported within HPA, one being through the Local and Regional Services system. Representatives from the Centre for Infections reported that fewer outbreaks were being reported to them on GSurv, although this principally affected norovirus infections.

Other items

12. Members discussed the HPA *Listeria* paper and encouraged the authors to go back again and consider possible changes in laboratory methods or reporting practices as such a sharp increase was unusual and should be regarded as

ascertainment bias until proved otherwise. They wondered whether the mandatory bacteraemia surveillance for MRSA might have had an effect.

13. Members considered a group of papers on *Campylobacter* and heard of Defra plans for a national prevalence survey in broilers at slaughter. Survey results would be used to inform a farm to consumption risk assessment.
14. An overview of surveys published between January and August 2005 was considered together with results to date from the non UK eggs survey. In the latter case, it was too early to make any comment on the results. The issue of sample sizes in different parts of the country was raised and this will be discussed by the ACMSF surveillance sub-group.
15. Progress on the Defra survey of *Salmonella* in laying flocks was reported. Where *Salmonella* spp, of public health significance are identified, farms receive a veterinary visit and longitudinal studies and/or epidemiological surveys are undertaken.

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