

## ADVISORY COMMITTEE ON THE MICROBIOLOGICAL SAFETY OF FOOD

### HORIZON SCANNING : NEWLY-EMERGING FOODBORNE PATHOGENS

#### Purpose

1. The purpose of this paper is to report on the work of the *Ad Hoc* Group on Newly-Emerging Pathogens, and to seek the agreement of the ACMSF to the establishment of a standing Newly-Emerging Pathogens Working Group.

#### Background

2. As part of the ACMSF's horizon scanning activities, Members agreed to the setting up of three *Ad Hoc* Groups. The terms of reference given to these Groups were to assemble information on the current situation in the particular areas identified for attention (ie. imports, changing social habits, and newly-emerging pathogens), in order to decide whether there was a potential problem in relation to the microbiological safety of food; and to recommend to the ACMSF whether the Committee needed to undertake further action.

#### Newly-emerging foodborne pathogens

3. Membership of the *Ad Hoc* Group set up to consider the question of newly-emerging foodborne pathogens comprises :-

#### Chair

Professor Paul Hunter

#### Members

Dr David Brown

Dr Katherine Hadley

Professor Mac Johnston

Mr Alec Kyriakides

Dr Sarah O'Brien.

4. For the purposes of the Group's work, the ACMSF defined newly-emerging pathogens as microorganisms which might constitute a potential new food poisoning threat in the near future but which had not previously been regarded as problematical. Examples given were organisms like *Aeromonas* and *Salmonella* Newport, and parasites. The *Ad Hoc* Group decided that re-emerging pathogens, whose importance had declined but was showing signs of increasing again, should also be included.

### ***Ad Hoc* Group's deliberations**

#### ***Literature review***

5. The *Ad Hoc* Group met on 10 November to address this issue. Members considered two papers reviewing factors in the emergence of infectious diseases,<sup>1</sup> and emerging issues in microbiological food safety.<sup>2</sup> Members felt that, based on their own observations, a review of the scientific, medical and technical literature was likely to yield little additional information. It was felt that any benefits were unlikely to be commensurate with the resources required to carry out a comprehensive literature review.

#### ***Duplicating the work of others***

6. Conscious of the existence of groups like the CMO/CVO UK Zoonoses Group, Members debated at some length the need for the ACMSF to play an active and on-going role in relation to newly-emerging foodborne pathogens. They were particularly keen to avoid duplicating the work of other Groups. However, Members were mindful of the importance of the ACMSF's horizon scanning function, and of the need for the Committee to be able to react quickly to assess the potential risk of newly-emerging, or re-emerging, pathogens. The Group therefore considered that there was a legitimate and relevant role for the ACMSF in rapidly identifying potential foodborne concerns, assessing the potential human health risk through food chain exposure pathways, and alerting the Food Standards Agency (FSA), as necessary, to the need for action to protect consumers.

#### ***Possible role for ACMSF***

7. *Ad Hoc* Group Members felt that a 'snap shot' approach would not necessarily be helpful in identifying, and assessing the risk from, newly-emerging (or re-emerging) foodborne pathogens. However, it was felt that there could be benefits to be derived from establishing a standing body which could combine intelligence monitoring, rapid risk assessment (perhaps an initial, informal assessment, followed by a more formal, template-based, risk assessment as and when required), and early alerting of the full ACMSF to the possible need for further action. The risk assessment could include consulting external experts, as necessary.
8. This kind of standing body could gather information continuously, through its members, calling on national and international outputs, established alerting arrangements, conference proceedings, professional contacts, etc.

Coverage would include new microbial diseases in humans, including zoonotic infections, new diagnostic technologies, new food processing and preserving technologies, and changing human behaviour. Potential issues and concerns identified would be circulated to all members of the body for rapid discussion about whether initial concerns required further, more formal, investigation. Members envisaged that such a body would conduct the bulk of its business electronically or by telephone conferencing, without the need to meet, thus speeding up response times significantly. In addition to alerting the full ACMSF when the possible need for further action was identified, such a body would also report routinely to the Committee on matters where no action had been considered necessary.

9. Such a body could, if required, also carry out the first consideration of any issues concerning newly-emerging or re-emerging foodborne pathogens referred to the ACMSF by the FSA.

### **Recommendation**

10. It is recommended that the *Ad Hoc* Group on Newly-Emerging Pathogens should be transformed into a standing Newly-Emerging Pathogens Working Group to carry out the functions described above. It is proposed that the terms of reference of the Working Group should be to :-

- gather intelligence on a continuous basis in order to facilitate the rapid identification of potential threats to UK consumers from exposure to newly-emerging or re-emerging pathogens through food chain exposure pathways;
- assess the significance of newly-emerging or re-emerging foodborne pathogens; *and*
- undertake any risk assessment work on newly-emerging or re-emerging pathogens referred to it by the ACMSF;

*in each case consulting other experts as necessary.*

- regularly report back to the ACMSF, including alerting the Committee to the need for any action to protect human health.

11. Members are invited to agree to the establishment of a standing Newly-Emerging Pathogens Working Group with the terms of reference as described above.

## References

1. Morse S S. Factors in the emergence of infectious diseases. *Emer Infect Dis* 1995; **1(1)** : 7-15.
2. Meng J, Doyle M P. Emerging issues in microbiological food safety. *Annu Rev Nutr* 1997; **17** : 255-275.