



**Food and Agriculture
Organization of
the United Nations**



**World Health
Organization**

**JOINT FAO/WHO ACTIVITIES ON RISK ASSESSMENT OF MICROBIOLOGICAL
HAZARDS IN FOODS**

FAO/WHO Expert Meeting on Salmonella and Campylobacter in chicken meat

**FAO Headquarters, Rome, Italy
4 – 8 May 2009**

Call for Data and Call for Experts

Note: Deadline for submission of CV's in response to the call for experts is 10th March 2009

Note: Deadline for submission of data in response to the call for data is 31st March 2009

Background

Salmonellosis and campylobacteriosis are among the most frequently reported foodborne diseases worldwide. While numerous potential vehicles of transmission exist, commercial chicken meat has been identified as one of the most important food vehicles for these organisms. In light of their importance FAO and WHO have already undertaken risk assessments on *Salmonella* and *Campylobacter* in broiler chickens (FAO/WHO 2002; 2008). At the time of their completion these risk assessments, provided an overview of the available knowledge on these organisms and a risk assessment framework to facilitate the evaluation of various interventions to address the risks associated with these pathogens in broiler chicken meat at the point of consumption.

Although specific data on the burden of foodborne disease associated with *Salmonella* and *Campylobacter* in poultry is limited, it is considered to be significant; however the risk varies according to control measures and practices implemented along the chain from primary production to final preparation for consumption. Furthermore, the presence of these organisms in poultry is also impacting trade, and recently, the detection of *Salmonella* in poultry products has led to rejection of large consignments of raw poultry meat. While the scientific basis for such actions is not always clear the economic impacts can be extensive. Thus the impact on human health and the associated costs, the trade disruptions and the cost of implementing effective control measures has meant that the Codex Alimentarius Commission in 2007 agreed that the development of guidelines for the control of *Salmonella* and *Campylobacter* in poultry was a priority. Later that year, at its 39th session, the Codex Committee on Food Hygiene (CCFH) agreed on the approach to be taken in the development of the draft guidelines. Essentially the guidelines are to consist of three sections, one which addresses good hygiene practices, one which addresses hazard-based control measures and a third which focuses on risk based control measures. In the past year much work has been undertaken to address the first section and this is nearing completion. Work has also begun on the hazard based control measures; however the availability of data on the practical implementation of such measures has implications on this section of the guidelines. The third section of the guidelines is envisaged to be used in conjunction with a user friendly web-based risk management decision support tool, to be developed by the Joint FAO/WHO Expert Meetings on Microbiological Risk Assessment (JEMRA), which will allow the risk manager to input data specific to his/her production and processing system and thereby evaluate measures which might be most effective for risk reduction in those particular conditions.

In order to continue with their work and ensure that it is underpinned with the most robust scientific data, the 40th session of the CCFH requested FAO and WHO to provide them with the necessary scientific advice. Based on this request JEMRA is convening an expert meeting with the following Terms of Reference:

- To carry out an independent assessment and review of available scientific information on control of *Campylobacter* and *Salmonella* at relevant steps throughout the broiler chain.
- To evaluate quantitative aspects of hazard reduction in terms of prevalence and concentration following specific interventions.
- To evaluate likely outcomes of specified interventions in terms of hazard reductions in the commercial setting.
- To assess the feasibility of developing a web-based risk management tool decision support tool.
- To develop a framework and identify any further data needs that may be required for the web-based risk management decision support tool to be developed by JEMRA.

CALL FOR DATA

In order to fulfil the above terms of reference it will be critical to receive additional data related to *Salmonella* and *Campylobacter* in poultry and chicken meat as well as information on commercial poultry production and processing practices in all regions of the world. It is only in this way that both the scientific advice provided to Codex and the subsequent guidelines developed can be relevant to poultry production and processing systems around the world.

In identifying their data needs the last session of the CCFH noted that the quantitative information that is needed should be primarily sourced from regulators and industry as such data would provide evidence of key interventions, many of which have been described in the scientific literature, that are being applied in commercial settings.

The following information is requested:

- Quantitative information on changes to levels (prevalence and/or concentration) of *Campylobacter* and or *Salmonella* as a consequence of a specific intervention at any step in the food chain, i.e.:
 - Primary production (elite flocks to broiler growing);
 - Processing (slaughter to chill/freeze)
 - Storage and distribution (transport through to consumer)
- More specifically, quantitative information on any changes to levels (prevalence and/or concentration) of *Campylobacter* and or *Salmonella* as a consequence of a specific intervention or interventions at the following steps are needed:
 - Depopulation and transport to slaughterhouse
 - Scalding, defeathering and evisceration
 - Washing and chilling
 - Storage, retail and consumer handling.

Potential sources of this data could include:

- Data from testing of the effectiveness of a control measure
- Data used to establish critical limits at Critical Control Points
- Verification data after a new intervention has been put in place.

2. Birds other than broilers

Any of the above data relating to birds other than commercially produced and processed broilers, which are ultimately marketed as chicken meat.

3. Monitoring

Countries are asked to provide examples of monitoring programmes (regulatory or industry driven) specific for *Campylobacter* and *Salmonella* that will provide input into areas where data might be available and the impact of potential interventions could be monitored e.g. at:

- Primary production (elite flocks through to slaughter flocks)
- Processing
- Transport and distribution
- Retail

In addition to the above it will also be critical to have information available on:

- The types of poultry production (indoor, outdoor, intensive, organic, free range, age to which birds are grown, implementation of biosecurity measures etc.) and processing (small scale, large scale etc.) systems that exist in different parts of the world and their relative contribution to the availability of poultry both on the domestic and international (i.e. export) markets
- The level and type of integration that exists in the poultry chain (are production and processing units controlled by the same company? What is the contribution of small production units to commercial processing etc.)
- Any risk assessments that have been undertaken to specifically address *Salmonella* and *Campylobacter* in poultry meat?

IMPORTANT: When providing data on prevalence and concentration of microorganisms, please also include information on the sample plan, methodology used and quality control programme in the laboratory.

Request for risk assessments and other relevant information

FAO and WHO are requesting **governments, interested organizations, poultry processors, consumer organizations, academia, and individuals** to submit any available data on the specific areas indicated above. This data may be published or unpublished. Reference should be made to related published studies, where applicable. Receipt of such information is very important in ensuring the provision of appropriate science based expert advice on *Salmonella* and *Campylobacter* in poultry at the international level.

Confidential and/or unpublished risk assessment

FAO and WHO recognise that some of the information and relevant data which are now required may be unpublished or of a confidential nature. With regard to unpublished information and data, this remains the property of the author for subsequent publication by the owner as original material. Unpublished confidential studies that are submitted will be safeguarded in so far as it is possible to do so without compromising the work of FAO and WHO. Specific issues relating to confidentiality should be discussed directly between the information and data owners and FAO/WHO. For these and other issues please contact FAO and WHO at the contacts provided below.

Please submit any relevant information (electronic and / or hard copies), in any official United Nations language (English, French, Spanish, Arabic, Chinese, Russian), and with title and short description of the content in English if possible, to either of the following addresses, by **31 March 2009**.

CALL FOR EXPERTS

In addition FAO and WHO are currently in the process of identifying experts to participate in an expert meeting on *Salmonella* and *Campylobacter* in poultry on 4 – 8 May 2009 and in future work in this area. In particular expertise is being sought in the following areas:

- Poultry production systems
- Biosecurity in poultry production

- Poultry processing systems
- Control measures for *Salmonella* and *Campylobacter* that are being applied at the primary production and processing levels and their efficacy.
- Risk assessment of *Salmonella* and *Campylobacter* in poultry

FAO and WHO are particularly interested in identifying experts from countries which are large producers of poultry, developing countries and the poultry industry.

If you are interested in being considered as an expert for this meeting please submit your curriculum vitae, as soon as possible, to either of the above addresses, highlighting your experience in the poultry industry and in particular in relation to *Salmonella* and *Campylobacter* in poultry. The closing date for receipt of expressions of interest and CVs for the forthcoming meeting is **10th March 2009**. Submissions received after that date will be considered for future activities in this area.

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