

71^e Session générale de l'OIE

Synthèse de la présentation du Président du Groupe de travail de l'OIE sur la sécurité sanitaire des aliments d'origine animale pendant la phase de production

Parmi les réalisations et étapes clés survenues depuis que des discussions ont été initiées entre le Directeur général de l'OIE et le Président de la Commission du Codex Alimentarius (CCA) en 2001 portant sur la nécessité d'une coordination et d'une intégration des activités de l'OIE et de la CCA en matière de sécurité sanitaire des aliments, afin de réduire les risques d'origine alimentaire au niveau du consommateur, figurent notamment les suivantes :

- préparation, en mars 2002, d'un document d'information décrivant la portée des travaux à accomplir, intitulé « Coordination et intégration des activités liées à la sécurité sanitaire des aliments de l'Office international des épizooties et de la Commission du Codex Alimentarius afin de réduire les risques d'origine alimentaire au niveau du consommateur »,
- réunion, en avril 2002, d'un groupe ad hoc d'experts internationaux,
- préparation d'un document intitulé « Le rôle des vétérinaires dans la prévention et la gestion des maladies liées aux aliments, notamment au niveau des éleveurs de bétail »,
- résolutions N° XV et XXII découlant de la 71^e Session générale de mai 2002 donnant pour mandat au Directeur général de l'OIE de constituer un Groupe de travail permanent chargé de la sécurité sanitaire des aliments d'origine alimentaire pendant la phase de production,
- réunion, en novembre 2002, du Groupe de travail permanent sur la sécurité sanitaire des aliments d'origine alimentaire pendant la phase de production.

Le Groupe de travail est composé des membres du Groupe ad hoc d'origine, auxquels a été adjoind un membre supplémentaire représentant le Secrétariat du Codex de la FAO.

Le Groupe de travail a pris acte du fait que son rôle consistait à assurer la coordination des activités de l'OIE en matière de sécurité sanitaire des aliments d'origine animale pendant la phase de production et de conseiller le Directeur général de l'OIE et la Commission du Code zoosanitaire international à ce sujet. Par ailleurs, il a précisé que les travaux de l'OIE liés à la sécurité sanitaire des aliments d'origine animale pendant la phase de production avaient pour objectif de « réduire les risques alimentaires pour la santé humaine en évitant, éliminant ou maîtrisant les dangers imputables aux animaux avant l'abattage des animaux et la première transformation des produits d'origine animale ». Le mandat du Groupe de travail ainsi que ses modalités opérationnelles ont été fixés.

Le Groupe de travail a relevé le besoin que la Commission du Codex Alimentarius et l'OIE examinent de concert leurs normes en vigueur à l'heure actuelle et recensent toute lacune ou tout domaine de duplication éventuels. Il a identifié les sujets d'intérêt suivants pour conduire cet examen :

- questions horizontales couvertes ou en cours de discussion par les deux organisations,
- zoonoses qui ne sont pas visées actuellement dans le *Code zoosanitaire international* de manière appropriée,
- zoonoses qui n'affectent pas toujours les animaux,
- textes de la Commission du Codex Alimentarius abordant des sujets d'intérêt commun.

Le Groupe de travail a identifié le besoin de s'atteler immédiatement à la mise à jour des chapitres actuels du *Code* portant sur la tuberculose et la brucellose, afin de traiter plus en profondeur les divers aspects de la sécurité sanitaire des aliments d'origine animale pendant la phase de production.

Le Groupe de travail a identifié le besoin de mettre au point des procédures pour l'élaboration, l'adoption et la publication de normes conjointes (le cas échéant), pour la reconnaissance mutuelle des normes adoptées par l'autre organisation et pour l'établissement de liens entre les normes traitant de domaines connexes. Le Groupe de travail a considéré que les travaux menés actuellement par la Commission du Codex Alimentarius sur les principes généraux sur l'hygiène de la viande et de la volaille fourniraient l'opportunité d'évaluer les options susmentionnées et identifier les stratégies adéquates.

Parmi les progrès réalisés jusqu'à présent figurent notamment les suivants :

- examen, mené conjointement par le personnel des Secrétariats de la CCA et de l'OIE, des normes actuelles de l'une et l'autre organisation, et identification de toute lacune ou tout domaine de duplication éventuels,
- initiation d'un exercice de description des travaux à accomplir dans le cadre de la révision du chapitre du *Code* sur la tuberculose en vue de mettre à jour ses composants zoonitaires et d'introduire les éléments liés à la sécurité sanitaire des aliments,
- rédaction, à l'attention des membres du Groupe de travail, d'un document informel décrivant la portée des travaux à accomplir sur le « Role and functionality of veterinary services in meat hygiene throughout the food chain » (annexe I).

.../Annexe

NON-PAPER for 71st OIE General Session

Scoping paper for the working group on animal production food safety

Role and functionality of veterinary services in meat hygiene throughout the food chain

A. I. McKenzie and S. C. Hathaway

Introduction

In a contemporary food safety environment, veterinarians have an essential and rapidly changing role in the prevention and control of food-borne zoonoses¹ and other sources of food-borne disease. In many situations, this role is achieved in parallel to prevention and control of diseases and conditions of animal health importance.

The traditional focus of veterinary involvement in meat hygiene has been at the level of the slaughterhouse, but a "production-to-consumption", risk-based approach to food control demands integrated involvement throughout the food chain. Where zoonoses are concerned, it is clear that there is an overlap between public health and animal health objectives, and a duality of veterinary functions. Veterinary competence can also be shared even when public health and animal health objectives are separate and distinct, and a number of countries are exploring such synergies in the reform of regulatory systems.

The World Organization for Animal Health (OIE) has as its SPS responsibility for elaborating standards and related texts for the prevention, control and eradication of animal diseases and zoonoses, while the Codex Alimentarius Commission (CAC) elaborates standards and related texts for both safety and suitability aspects of food control.

The OIE Working Group on Animal Production Food Safety

The OIE Working Group on Animal Production Food Safety has developed a work programme to strengthen veterinary input to food safety at both the international and national level. The Working Group will advise the Director General on implementation of the OIE strategy regarding:

- Consideration all food-borne hazards arising from animals according to global food safety priorities;
- Reviewing OIE outputs to ensure animal production food safety is integrated in Specialist Commissions and *ad hoc* group activities;
- Fully contributing to food standards development by CAC².

There is a clear need for detailed exploration of the inter-related roles and functionality of veterinary services in the outputs of OIE and CAC. This Scoping Paper presents a proposal for elaboration of a Joint OIE / Codex text on the dual role and overall functionality of veterinary services in meat hygiene and animal health throughout the food chain. The proposal includes reference to regulatory, industry and public aspects of veterinary effort, and promotes the opportunity for enhancement of dual food safety and animal health roles.

Standards

OIE has identified that co-operation with CAC will enhance the scope and scientific quality of international standards, guidelines and related texts, especially in regard to food safety measures applicable at the farm level³.

¹ Any disease and/or infection which is likely to be naturally transmitted from animals to man

² Report of the meeting of the OIE *Ad Hoc* Group on Food Safety. Paris, 18-19 April 2002

³ Resolution No. XV. 70th General Session of the OIE, 2003

Annexe I (suite)

According to its Statutes, CAC should "promote coordination of all food standards work undertaken by intergovernmental and non-governmental organisations" (Article 1[b]). Objective 3 of the CAC Strategic Framework recognises that CAC needs to interact closely with OIE.

Possible results⁴ may be:

- Joint Codex/OIE standards or related texts developed through joint committees or similar mechanisms;
- Codex or OIE standards or related texts elaborated by one party (and other co-operating organisations) on behalf of the other;
- Substantial co-operation at the initial drafting stages of Codex or OIE standards or related texts, with either party acting as a subsidiary body.

Risk analysis

The emergence of risk-based approaches in elaboration of international standards has been highly influenced by the World Trade Organisation (WTO) Sanitary and Phytosanitary (SPS) Agreement. A primary tenet of this Agreement is that "Members shall ensure that their sanitary and phytosanitary measures are based on an assessment, as appropriate to the circumstances, of the risks to human, animal, or plant life or health, taking into account risk assessment techniques developed by the relevant international organisations".

In developing the International Animal Health Code, OIE focuses on standards for specified hazards of biological origin. In contrast, CAC has primarily addressed biological hazards in food by developing general hygiene provisions i.e. codes of practice, for different food commodities.

Risk assessment offers new opportunities to OIE and CAC in the elaboration of optimal sanitary measures, either as international standards or as technical advice to national governments, but it is noteworthy at this juncture that relatively few OIE and Codex standards are genuinely risk-based. In the case of food safety, improvements must be brought about in the face of ever-changing patterns of primary production, processing technology and consumer behaviour.

The application of a generic risk management framework is increasingly being recognised as a cross-sectoral means to bring about a reduction in risks to human and animal health⁵ (see below).

Format and criteria for development of an international standard on veterinary involvement in meat hygiene activities throughout the food chain

Veterinary involvement in meat hygiene activities throughout the food chain may encompass food safety and suitability, zoonoses and animal health. Activities in these areas will variably contribute to "reducing food-borne risks to human health by preventing, eliminating or controlling hazards arising from animals prior to primary processing of animals and animal products"⁶. Further, veterinary competence may contribute to other aspects of food safety risk management e.g. public health policy, integrated design of surveillance systems for chemical hazards, certification, risk communication.

In parallel, functionality aspects of veterinary services must be considered in respect of animal health activities that have no bearing on food safety or suitability (see below).

Development of a Joint Codex / OIE standard or related text (hereafter referred to as "standard") on the roles and functionality of veterinary services in meat hygiene throughout the food chain is an important initiative of the OIE Working Group on Animal Production Food Safety. (Other activities are focused on either OIE or Codex "standards").

⁴ Codex Alimentarius Commission (2003). Guidelines for co-operation with intergovernmental organisations. CX/GP 03/8

⁵ Risk Analysis in Biosecurity for Food and Agriculture by S. C. Hathaway. *In* Report of an Expert Consultation on Biosecurity in Food and Agriculture. FAO, Rome 10-13 September 2002

⁶ Report of the Meeting of the OIE Working Group on Animal Production Food Safety. Paris, 18-20 November 2002

Format

The suggested format for elaboration of the "standard" is:

- Overarching principles for veterinary involvement in meat hygiene, and other veterinary activities, throughout the food chain;
- A "code of practice" format that progresses through a "production-to-consumption" approach to meat hygiene;
- Subsections that develop principles and guidelines according to the particular segment of the food chain;
- Specific linkages to other OIE and Codex texts describing detailed aspects of possible veterinary inputs e.g. the draft text being developed by the OIE *Ad Hoc* Group of Experts on Antimicrobial Resistance that is responsible for developing standards on zoonotic bacteria and resistance determinants.

Criteria

Suggested criteria for elaboration of the "standard" are:

- Consideration of all hazards of possible food-borne significance
- Inclusion of animal health and welfare functions (including epidemiological surveillance) that may be carried out by veterinarians whose primary focus is food control;
- Representation of a "production-to-consumption" approach to food control;
- Reflection of cost-effective and efficient use of veterinary services and competence;
- Utilisation of risk assessment wherever possible and practical;
- Inclusion of HACCP where appropriate;
- Inclusion of suitability⁷ as well as safety aspects of food control;
- Differentiation of regulatory, industry and private veterinary service contributions.
Responsibility for International Certification

Many of the above criteria are "horizontal" in nature will need to be applied at each segment of the food chain, with a description of iterative loops to veterinary inputs at other segments.

***Ad hoc* Groups**

It is proposed that a several *ad hoc* Groups be formed to draft different modules for the "standard".

Each *ad hoc* Group should apply a generic framework for managing food-borne risks to consumers and describe veterinary inputs.

Each *ad hoc* Group should consider modular and "horizontal" aspects of:

- Regulatory frameworks and responsibilities;
- Veterinary activities relating to food safety and suitability, zoonoses and animal health, and welfare;
- Relative contributions from regulatory, non-regulatory (industry), private veterinary and para-professional sectors;
- The functionality of sharing veterinary competence to meet public health and animal health goals;

⁷ Food suitability is described by CAC as "assurance that food is acceptable for human consumption according to its intended use"

Annexe I (suite)

1. Hazards

Consideration of all food-borne hazards and their significance in terms of risks to human health is an essential meat hygiene activity and a core component of HACCP. Most meat-borne hazards of animal origin will either be intrinsic to the live animal or introduced by faecal and skin contamination during primary processing.

In parallel, hazards of animal health significance that can be detected in slaughter populations need to be identified so as to explore optimisation of veterinary effort.

Hazards arising from animals can be grouped into several categories e.g. zoonoses resulting from clinical disease in animals, zoonoses resulting from asymptomatic infections in animals, zoonoses arising from environmental contamination, and chemical sources.

Hazards can also be introduced into the food chain from environmental sources, and zoonoses can obviously result from occupational exposure. As some food-borne zoonoses may occur independently of the consumption of meat and meat products e.g. contamination via irrigation of vegetables with animal-derived pathogens, these pathways also need to be considered in terms of prevention and control.

2. "Production-to-consumption" approach

Currently, Codex codes of practice for food commodities of animal origin constitute one expression of a "production-to-consumption" approach to food control. Although they include guidelines on primary production to a varying degree, such sections are generally limited in extent.

The Proposed Draft Code of Practice for Meat Hygiene identifies a number of generic segments in the food chain⁸ and these could be used as a partial template in development of a Joint OIE/CAC standard for veterinary involvement in meat hygiene activities throughout the food chain. It should be noted that many aspects of meat hygiene require iterative loops between different segments in the food chain for optimal risk management. Effective functioning of good hygienic practice (GHP) and HACCP is reliant on such information exchange.

Several other OIE and Codex standards can be utilised to describe veterinary involvement in meat hygiene throughout the food chain e.g., Principles for Food Import and Export Inspection and Certification (CAC/GL 20 - 1995), Recommendations of the *Ad hoc* Intergovernmental Task Force on Animal Feeding (Alinorm 01/38 and Alinorm 01/38A). A range of stakeholders may be involved in implementation of food controls e.g. regulatory authorities, industry and the public, and measures that are decided on may not necessarily be mandatory regulatory controls e.g. consumer education in safe food handling practices.

Other aspects of a "production-to-consumption" approach to meat hygiene are:

- Integrated design and implementation of regulatory requirements and other risk management activities throughout the food chain;
- Monitoring and surveillance at the farm level, including consideration of data from non-regulatory sources, and monitoring at other steps in the food chain, including meat inspection;
- Monitoring and risk management of antimicrobial resistance;
- Exchange of monitoring information with all interested parties;
- Animal identification systems and traceability of meat and meat products;
- Utilisation of diagnostic tests;
- Competence of food control authorities in exporting country;
- Certification and official assurances;
- Emergency response capability;
- Integrated database management, epidemiological investigations and predictive microbiology;
- Potential contribution of the international transport of live animals to meat hygiene.

⁸ Proposed Draft Code of Hygienic Practice for Meat. Alinorm 03/16A, Appendix III. Codex Alimentarius Commission

3. Risk assessment and risk management

Generic framework for managing public and animal health risks

To the greatest extent possible and practicable, design and implementation of sanitary measures should be based on application of four components of a generic framework:

Preliminary activities by the risk manager

Following identification of a public health or animal health issue by the risk manager, this initial process may include establishment of a risk profile to place the issue within a particular context, and provide as much information as possible to guide further action. The risk manager may commission a detailed risk assessment as an independent scientific process to inform decision-making, and if so, risk assessment policy should be established⁹. Once a risk assessment has been received, the last step in preliminary risk management activities is to consider the results for completeness and appropriateness.

Evaluation of risk management options

This is the process whereby potential risk management options are identified, and then selected according to appropriate decision-making criteria. It will usually involve balancing expectations in light of scientific information on risks and available measures. “Optimisation” of selected measures in terms of their efficiency, technological feasibility and practicality is an important goal.

Implementation of measures

Implementation of public or animal health measures will usually involve regulatory requirements, with a particular focus on HACCP. Flexibility in choice of individual measures applied by industry is a desirable element, as long as the overall programme can be objectively shown to achieve stated goals. On-going verification of sanitary measures by the competent authority is an essential action.

Monitoring and review of appropriateness of options chosen

This is the gathering and analysing of public and animal health data. Monitoring (which includes surveillance) should identify new problems as they emerge. Where there is evidence that required public and animal goals are not being achieved, redesign of measures will be needed.

Risk assessment and risk management of meat-borne hazards to human health

At present, there is room for significant improvement in many aspects of meat hygiene, especially in the areas of ante- and post-mortem inspection and microbiological process control. Measures should be: tailor-made to the spectrum and prevalence of hazards in the particular slaughter population, focused on the most significant risks to human health, and focused at those steps in the food chain where they have maximum likelihood of reducing food-borne risks.

Other aspects include:

- Performance-based inspection for process control;
- Establishing decision criteria for the outcome of risk reductions;
- Risk-based surveillance of live animals and monitoring of meat and meat products throughout the food chain;
- Effective information exchange and risk communication between all interested parties.

⁹ Risk assessment policy refers to the documented guidelines (provided by the risk manager) for policy choices and scientific value judgements that may be necessary at specific points in the risk assessment.

Annexe I (suite)

Risk assessment and risk management of animal health hazards

In determining the role and functionality of veterinary services in meat hygiene throughout the food chain, hazards of animal health significance that can be detected in slaughter populations must first be identified, the risks assessed and properly managed, so as to achieve optimisation of veterinary effort.

The extent to which animal health risk management functions should be carried out by veterinarians whose primary focus is food control will be explored by the *ad hoc* Groups. It is not envisaged that these veterinarians would be engaged in detailed risk assessment and establishment of animal health standards, however their contribution to achieving animal health goals should be fully assessed in order to maximize benefits to both sectors.

4. Food suitability

Beyond the risk assessment and risk management paradigm, assuring food suitability is an essential component of a meat hygiene programme.

Food hygiene is described by CAC as all conditions and measures necessary to ensure the safety and suitability of food at all stages of the food chain, and suitability is described as the assurance that food is acceptable for human consumption according to its intended use. It is clear that a major component of meat hygiene is related to detection and removal of abnormalities in meat that are not of public health significance. Other aspects of suitability relating to consumer expectations include certification requirements e.g. Codex General Guidelines for Use of the Term "Halal" (CAC/GL 24-1997).

5. Functionality

Functionality aspects of veterinary meat hygiene services in relation to other veterinary activities that have no bearing on food safety or suitability is a key contemporary issue.

Effective meat hygiene requires a high level of interaction and risk communication with many interested parties. Veterinarians have a major role to play in these processes, especially in respect of the interface between different veterinary services, and other government agencies, that may be involved in food control. Further, food safety regulatory reform in a number of countries is changing the traditional roles of such parties. In many countries, industry now has the primary responsibility for implementing meat hygiene programmes, and regulatory authorities are increasingly moving towards verification and audit of outcome-based regulatory requirements. This provides new opportunities and responsibilities for veterinarians.

6. Animal welfare

Although animal welfare is beyond the mandate of CAC, it is an important area of involvement by the OIE.

References on guidelines and recommendations on animal welfare will be an essential element of the Joint OIE/CAC "standard".

7. Multidisciplinary framework

“Effective meat hygiene requires multidisciplinary scientific and technical inputs. Further, utilising risk assessment in a contemporary food safety environment is a multidisciplinary responsibility”¹⁰.

The Joint OIE/CAC "standard" should be developed within the context of all multidisciplinary inputs to food control.

¹⁰ Future Trends in Veterinary Public Health. Report of a WHO Study Group. WHO, Geneva 2002

Recommendations

It is recommended that:

- the 71st General Session of the OIE request the OIE Working Group on Animal Production Food Safety to develop a Joint OIE/CAC "standard" on the role and functionality of veterinary services in meat hygiene throughout the food chain
- The OIE Working Group on Animal Production Food Safety establishes *ad hoc* Groups to draft particular sections of the "standard".

The OIE Working Group on Animal Production Food Safety ensures appropriate consultation and technical exchange between all interested parties in the development of the "standard".
